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ABSTRACT

This report presents a plan for nursing education in the State of Washington that would help in alleviating the shortage of nurses in the state. The plan addresses the current status of nursing education and critical issues pertaining to the following: (1) the geographic availability of nursing education and training programs; (2) curriculum standards for each type of nursing education and training program (practical nursing, associate degree registered nursing programs, and bachelor degree programs in nursing); (3) procedures to facilitate optimal transfer or granting of course credit; and (4) evaluation processes to maximize opportunities for receiving credit for knowledge and clinical skills. The report also includes discussions concerning the national nursing shortage as well as the nursing shortage in the State of Washington, the structure of nursing education in Washington, and the legal and accrediting authority for the content and quality of nursing programs within the state. Appendices present a relevant portion of state Senate Bill 6152 that addresses the nursing shortage and requires the preparation of a statewide plan, a list of the advisory committee members, a summary of other states' plans for nursing education, and locations where nursing programs are being offered in Washington State. Contains 16 references. (GLR)

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STATE PLAN

FOR

IMPROVING ACCESS

TO

NURSING EDUCATION

HIGHER EDUCATION COORDINATING BOARD

917 LAKERIDGE WAY (GV-11)
OLYMPIA, WASHINGTON 98504

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December 14, 1990

MEMORANDUM

TO: Members of the Senate Health and Long-Term Care Committee
Members of the House Health Care Committee

FROM: Ann Daley, Executive Director

SUBJECT: State Plan for Improving Access to Nursing Education

Attached is the report in response to the 1989 legislative directive to develop a state plan for nursing education that identifies how education can help alleviate the state nursing shortage.

At their December 1990 meeting, the Higher Education Coordinating Board adopted the recommendations contained in this report and directed the staff to transmit the report to the standing legislative committees on health care as required.

AD:JJ:cp
Attachment

CHARLES T. COLLINS
Chair

ANN DALEY
Executive Director

STATE OF WASHINGTON
HIGHER EDUCATION COORDINATING BOARD
917 Lakeridge Way, GV-11 • Olympia, Washington 98504 • (206) 753-2210 • (SCAN) 234-2210

RESOLUTION 90-37

WHEREAS, In 1989, the Washington State Legislature directed the Higher Education Coordinating Board to develop a state plan for nursing education; and

WHEREAS, The purpose of the plan is to identify how education can help alleviate the state nursing shortage; and

WHEREAS, The Higher Education Coordinating Board, working with an advisory committee, has conducted a study focusing on issues as directed by the Legislature; and

WHEREAS, The report has been distributed for comment to state agencies, professional associations, and higher education institutions potentially affected by the recommendations contained in the report; and

WHEREAS, The Board staff has been responsive to the concerns and suggestions of the nursing community and its many constituents in the development of the final report; and

WHEREAS, The Board has reviewed the staff recommendations and has received comment from interested parties at its meeting of December 12, 1990; therefore, be it

RESOLVED, That the Higher Education Coordinating Board hereby adopts the recommendations contained in the *State Plan for Improving Access to Nursing Education,* and directs the staff to transmit the report to the standing committees on health care, as required.

Adopted:
December 12, 1990
Attest:

M. Lyle Jacobsen
Charles T. Collins, Chair

Mary C. James
Mary C. James, Secretary

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EXECUTIVE SUMMARY

Introduction

In 1989, the Washington State Legislature directed the Higher Education Coordinating Board to develop a state plan for nursing education. There was legislative concern about the national and state nursing shortage, and the purpose of the plan was to identify how education could help alleviate that shortage. The plan was required to address:

- geographic availability of nursing education and training programs
- curriculum standards for each type of nursing education and training program
- procedures to facilitate optimal transfer or granting of course credit
- evaluation processes to maximize opportunities for receiving credit for knowledge and clinical skills

A 1986 study by the American Hospital Association projected a demand in Washington state for 12,270 more registered nurses than the available supply in 1990. That imbalance between supply and demand in Washington is predicted to increase to a shortage of 38,130 in the year 2000.

The demand for nurses is directly related to changes in the delivery of health care and the aging of the population. Hospitals are requiring more highly skilled and educated nurses, and the management of home health care is requiring increasing numbers of baccalaureate-prepared nurses. The utilization of long-term care facilities for more acute patients has also caused increasing demands for nurses.

Although higher education alone cannot solve this problem, there are several ways in which it can help alleviate the nursing shortage:

- Educate more nurses
- Provide broader geographic distribution of programs
- Help nurses move through the educational system more easily
- Encourage nurses to enter and stay in the profession through additional education.

Addressing these issues is complicated by the complex structure of nursing. It is one of the few professions which provides multiple entry points into practice. **Nursing**

assistant training is provided by high schools, secondary skills centers, vocational-technical institutes, community colleges, and by health care providers such as long term care facilities. Students may prepare for licensure as **practical nurses** at both vocational-technical institutes and community colleges. Students may prepare for licensure as **registered nurses** at community colleges (Associate Degree in Nursing) and public and independent four-year colleges and universities (Bachelor of Science in Nursing).

Geographic Availability

The state of Washington has 22 vocational/collegiate nursing assistant, 24 practical nursing, 21 associate degree nursing, 14 baccalaureate, 7 master's, and 1 doctoral nursing program in its public and independent institutions. There is no baccalaureate program north of the Puget Sound area, in the north central area, or the southeast, and only four total (Spokane, Yakima, Tri-Cities) east of the Cascades. The associate degree and practical nursing programs are better distributed, due to the state's extensive community college system; however, these programs are not available in many remote areas of the state.

This plan does not recommend the creation of additional nursing programs in the state. Such programs are necessarily costly in terms of equipment, space, and the faculty time required for clinical instruction. In addition, they are dependent on the availability of nearby comprehensive clinical facilities. Instead, this plan focuses on the obstacles to using existing programs to provide better geographic access, and suggests ways to overcome those obstacles.

Funding of Current Programs

Current enrollment levels of some nursing programs severely limit the extent to which higher education can help alleviate the nursing shortage. In 1989, for example, the community colleges accepted 71.9 percent of all eligible applicants, and the University of Washington only 54.4 percent of eligible applicants. Many independent colleges and universities, had available capacity for additional enrollments. Adequate funding of current programs must occur at both the institutional and state levels.

1. **The Board recommends that the State Board for Community College Education and the four-year public and independent colleges and universities give priority consideration to undergraduate and graduate nursing education in the allocation of funded new enrollments.**

2. **The Board recommends that in the 1991-93 biennium and beyond, the Legislature fund institutional requests for additional enrollments in nursing programs, and the required academic courses to support nursing, at rates which reflect the average cost of nursing programs.**

Faculty

The availability of qualified faculty is essential for the maintenance and growth of nursing programs. Faculty for practical nursing programs in vocational-technical institutes and community colleges are required to have vocational certification in their field. Faculty in registered nursing and advanced degree programs are required to have master's degrees in nursing. There is a shortage of master's prepared nurses to teach in registered nursing programs. Currently, several associate degree programs in Washington state have applied for waivers allowing full- and part-time faculty to teach without master's degrees.

Doctorally-prepared faculty, preferably with doctorates in nursing, are required for tenure-track and tenured positions in baccalaureate and graduate programs. Although they are recruited nationally, there has been some difficulty in obtaining doctorally-prepared faculty in specialty areas.

Independent and public institutions alike need to strengthen their commitment to faculty resources in order to address the changing educational needs of the profession.

3. **The vocational-technical institutes, two-year, and four-year higher education institutions of the state should provide adequate funds for salary, instructional support, and professional development to encourage, attract, and retain well-qualified nursing faculty.**

Additional Geographic Access

Expansion of nursing education into new geographic areas will require additional funding and qualified faculty. In addition, the availability of clinical facilities, instructional delivery systems, and employer and community support will be critical.

4. **The Board recommends that the Legislature fund initiatives for institutions to develop:**

   Additional geographic access (distance learning, telecommunications), focusing on rural areas. Proposals for expanded geographic access should be developed cooperatively among educational institutions with area hospitals and health care agencies to ensure adequate need and the availability of appropriate clinical sites.

   Expanded use of electronic classrooms in existing programs, including using self-paced learning labs for greater efficiency.

   Improved utilization of existing facilities and clinical sites, including increased evening and weekend instruction.

Student Access

Increasing geographic availability of programs will not succeed in alleviating the nursing shortage without simultaneous efforts to recruit and retain a wide diversity of students and to provide adequate financial support.

There is a dramatic shortage of male nurses and nurses from ethnic and racial minority populations in the state of Washington. Given the need to serve an increasingly diverse and multilingual state population, this shortage requires special attention. Scholarships and financial assistance do provide some opportunities for those who could not otherwise enroll, thus expanding the student mix to reflect the diversity of the citizenry.

The State of Washington has one scholarship program specifically for nurses. The Nurses Conditional Scholarship Program provides scholarships to students in practical, associate, baccalaureate, and master's degree programs. There is no question that need for the program exists and that it is serving the purposes and intent of the legislation. There continues to be far greater need than funds available.

5. **The Board recommends that institutions ensure a supportive environment for a wide range of nursing students by providing faculty and student education in cultural diversity, including diversity issues in the curriculum, and developing services for students with English as a second language, and for those who are educationally disadvantaged.**

6. **The Board recommends that institutions recruit more actively for nursing students who are men or people of color. Deans, directors and faculty of nursing education are encouraged to work closely with their Directors of Minority Affairs to ensure that nursing programs are understood and discussed with potential minority students.**

7. **The Board encourages institutions and deans and directors of nursing education to promote aggressively programs of financial assistance for their students and to ensure that nursing students are well informed of all forms of available financial aid.**

8. **The Board encourages nurse employer and constituent professional associations to address the need for increased funding for the Nurses Conditional Scholarship Program, in order to improve access to public institutions and to more fully utilize the available capacity at independent institutions. The Board also directs its staff to propose changes in the program to make it more responsive to nurses' needs.**

Articulation

Increasing enrollments in existing nursing programs and expanding to additional geographic areas will go a long way toward increasing the number of nurses available in the state. However, improving the access of practicing nurses to existing programs and increasing their mobility through the educational system are also necessary. Improved articulation provides more nurses with the level of education required in today's complex health care settings and creates incentives for them to remain in the profession.

Curriculum Standards

Students often perceive differences in curriculum standards among institutions as unnecessary roadblocks to mobility. Variations among institutions are normal and expected, though, as faculty and governing boards have differing visions of what a curriculum should look like. The agencies and associations with legal authority, especially the National League for Nursing (NLN) and the state nursing boards, do set and monitor minimum standards for curriculum, but they defer to the individual institutions to establish actual certificate and degree requirements. Peer review of programs through NLN accreditation helps to maintain curriculum standards consistent with the discipline nationally, although not all programs in the state are professionally accredited.

Some programs have responded to the challenges of a changing profession or geographic location by requiring additional courses to prepare students to meet the increasing demands of practice or respond to local community needs. These often increase the total credits required for graduation, not all of which will transfer to the next level of education.

There is and should be room in the setting of curriculum standards for individual institutions to ensure that nursing programs at the same level are reasonably comparable. Degree requirements at one institution should not be excessive or significantly out of line with others at the same degree level or within the profession as a whole.

9. **The State Board for Community College Education and the Superintendent of Public Instruction should collaborate with higher education administrators, nursing faculty, and other faculty to ensure that program credits for nursing degrees or certificates generally conform to the credit load of other programs preparing students for the same degree within the state. This effort should include a review of total course requirements to ensure that institutions do not place undue hardship on students to reach program completion.**

10. **All nursing programs in the state of Washington should be professionally accredited. The State Board for Community College Education and the Superintendent of Public Instruction should develop plans to have all ADN and PN programs accredited by or meet the standards of a nationally recognized nursing specialty association in the next ten years.**

Transfer of Credit

Existing statewide policies, college and university requirements, and differences in individual programs all influence how transfer of credit is implemented. Transfer of credit is also addressed in the NLN standards for member institutions. Blanket transfer of credit is not permitted by the NLN and transcripts must be evaluated individually.

In order to encourage educational mobility, the system must communicate how various levels of instruction interrelate, clearly define the differences and similarities among programs, provide planning assistance for the student to pursue further education, identify the most helpful types of preparation, and offer reasonable assurances for educational progress.

11. **The State Board for Community College Education and the Superintendent of Public Instruction should collaborate to improve articulation for nursing students between vocational-technical institute and community college LPN and ADN programs wherever possible. These efforts might include: formal articulation agreements, developing concurrent enrollment agreements so that students may take courses through both systems, or having the vocational-technical institutes contract with the community colleges for specific non-nursing courses.**

12. **Deans, directors and faculty of nursing programs at four-year public and independent institutions should collaborate with practical and associate degree nursing educators to improve articulation for licensed nurses enrolling in baccalaureate programs. Efforts should focus on communicating each institution's general university and pre-nursing course requirements, transfer of credit policy, and credit by examination policy. Both common and unique requirements among baccalaureate institutions should be identified, clarified and communicated.**

Evaluation and Testing

The evaluation of skills and knowledge obtained through prior learning and experience is an important part of an articulated system that encourages educational mobility. Such evaluation is especially critical in nursing education where students often bring significant work experience or vocational training to the educational setting.

The evaluation process must weigh knowledge and clinical skills of nursing assistants, practical nurses, and registered nurses, who may have received very different experience in non-collegiate settings. Students wishing to continue their nursing education must understand that the currency of their academic credentials, the currency of their practice, and the scope of that practice all influence how much credit they receive for prior learning and where they are placed in the next level of nursing education.

13. **Faculty of nursing programs at vocational-technical institutes and community colleges should adopt and publish clear evaluation methods for recognizing skill proficiencies of nursing assistants.**

14. **Deans, directors and faculty of nursing education should collaborate on the adoption and publication of clear and consistent methods of validating prior learning of nursing students at all levels, especially in the area of nursing competencies.**

15. **Deans, directors and faculty of nursing education should work actively with their colleagues in other academic departments to develop and make readily available to nursing students challenge exams and other evaluation methods for required non-nursing courses.**

Student Information

Many options are available for individuals who want a nursing education, and the large number of programs, institutions, and degrees that relate to nursing can be confusing to prospective students, as well as practicing nurses. Students need to have clear, consistent information about the differences among nursing programs and the limitations of existing articulation agreements. They need to know the requirements of each nursing degree and understand how their professional options may or may not be limited by their credentials.

16. **The Board recommends that the Legislature fund the development and publication of a nursing student resource guide. The guide should be made available to all high school, institute, college, and university counselors and applicants to nursing programs at every level. The HECB budget request for the 1991-93 biennium includes $25,000 to fund this recommendation.**

17. **The Board recommends that deans, directors and faculty of nursing education annually extend an invitation to area high school counselors, economic development councils, and other appropriate community groups to visit their program site, to discuss the nursing profession, and to facilitate student recruitment.**

18. **The four-year institutions, the State Board for Community College Education and the Superintendent of Public Instruction should cooperatively improve nursing education information concerning transferability of credits and available options to ensure that individual students receive accurate career counseling at high schools, institutes and colleges.**

Efforts to Improve Articulation

Improving articulation has as its goal encouraging practicing and non-practicing nurses to continue their education at the next appropriate level. Improved articulation into programs with no space available, however, is counterproductive and just increases student frustration. To be successful, articulation must be tied to increased enrollments.

19. **The Council on Nursing Education in Washington State (CNEWS) should continue their articulation conferences to address barriers to a coordinated system of nursing education. The HECB budget request for the 1991-93 biennium includes $4,000 to fund this recommendation.**

Measuring Progress

The success of this plan is dependent primarily on the commitment of nursing educators and higher education to make nursing programs more accessible and on the Legislature to adequately fund those programs. There should be continued communication on the progress towards increased access to ensure meeting the goals of the plan.

20. **The Legislature should appoint an Advisory Committee to monitor progress toward fulfilling these recommendations. The committee should conduct an interim review in the fall of 1991, with a final review after implementation in January, 1992.**

PART I - BACKGROUND

A. Authorizing Legislation

In 1989, the Washington State Legislature adopted Senate Bill 6152 creating the Department of Health. Section 713 of the bill directed the Higher Education Coordinating Board, in consultation with various agencies, institutions, and organizations, to develop a state plan for nursing education. There was legislative concern about the national and state nursing shortage, and the purpose of the plan was to identify how education could help to alleviate that shortage. Specifically, the legislature was concerned that nursing students were having difficulty moving from one program to another, particularly as students advanced their education, and that nursing education programs were not adequately available in several areas of the state.

The statutory language is explicit. It requires a progress report to the standing legislative committees on health care by December 1, 1989, a final plan to be delivered by December 1, 1990, and an implementation date of January 1, 1992. Specifically, the statute (Appendix A) requires that the plan address:

- geographic availability of nursing education and training programs
- curriculum standards for each type of nursing education and training program
- procedures to facilitate optimal transfer or granting of course credit
- evaluation processes to maximize opportunities for receiving credit for knowledge and clinical skills

B. Relationship to Existing HECB Policies

This plan for nursing education has been developed consistent with other Higher Education Coordinating Board general plans for higher education.

1. Building a System, the Washington State Master Plan for Higher Education (1987) is designed to promote excellence in Washington's higher education system. In order to achieve excellence, the state must promote quality in institutions of higher education and provide access to these institutions. The Board acknowledged that the state has a responsibility to provide a quality higher education system to promote cultural enrichment, develop social leadership, and foster economic development, and to see that the benefits of higher education are distributed equitably. Educational opportunity must not be a function of an individual's race, sex, disability, wealth, or place of residence.

In the Master Plan, the Board found the 27 community colleges well-situated in relation to the population. These institutions provide a high level of accessibility for vocational and technical training and lower-division baccalaureate courses. There has

been a serious access problem, however, to public institutions providing upper-division baccalaureate and graduate education. Unlike the community colleges, the four-year institutions are not well situated in relation to the population. Four of the state's six baccalaureate institutions are located in areas with less than 10 percent of the population within 30 miles. In order to improve access, the Master Plan recommended additional upper-division and graduate educational services in Spokane, Southwest Washington, the Tri-Cities, Yakima, and the Puget Sound area.

The Board found that expanding service to residents of rural areas presents a difficult challenge. Community colleges are geographically located to meet most of the vocational and academic transfer needs of students in rural areas, but upper-division and graduate offerings are lacking. Telecommunications will be an important source of upper-division and graduate-level service for smaller urban areas and rural communities.

2. In 1989, the Legislature authorized the creation of five branch campuses: UW-Tacoma, UW-Bothell/Woodinville, WSU-Spokane, WSU-TriCities, and WSU-Southwest Washington, and the Yakima Center. In Design for the 21st Century: Expanding Higher Education Opportunity in Washington (1990), the Board constructed an enrollment plan for the state based on the assumption that public and independent institutions, as well as branch campuses, will be used to achieve long-range enrollment goals. Included in the Board's recommendations are to:

> Establish a long-term enrollment goal to achieve a level of upper-division and graduate enrollment equal to the 70th percentile in national participation rates by the year 2010. This would add an estimated 43,000 students (28,000 upper-division and 15,000 graduate) by 2010, a 28 percent increase over current enrollment.
>
> Increase undergraduate and graduate enrollment levels at the regional institutions and increase graduate enrollment at the two research institutions to utilize full capacity by the year 2005.
>
> Rely on growth projections provided by private four-year institutions to assist the state in meeting its enrollment goal.
>
> Increase community college enrollment levels to reflect population growth and anticipated new demand for academic transfer programs in branch campus areas. This would add an estimated 28,650 community college students by 2010.
>
> Build branch campus facilities to serve 17,020 students by 2010.
>
> Establish upper-division and master's level degree programs as the primary mission of branch campuses.
>
> Require each home institution to develop a policy on the use of telecommunications in branch campus instruction.

Courses and degree programs offered at branch campuses will be consistent with each institution's role and mission and within its authority for educational service, as established in the Master Plan for Higher Education. Due to the need for additional graduates in certain disciplines, institutions are encouraged to propose degree programs at the branch campuses in a number of disciplines, including nursing. In response to this need, nursing programs are being developed for each of the branch campuses.

3. The Board currently is conducting a study of graduate education to be completed in May, 1991. The Board adopted a statewide enrollment goal for graduate programs of the 70th percentile by 2010. This translates into an approximate **doubling** (23,300 to 40,000) of the total number of students in public and independent graduate programs.

The graduate education study will address which graduate programs the state should have and how they should be distributed across the state. It will also recommend changes in existing policies and funding levels needed to support graduate education. As a part of the study, both public and independent institutions will provide graduate education growth plans for the next twenty years. All graduate degrees, including nursing, will be addressed and existing state needs assessments for nurses will be incorporated.

4. Substitute Senate Bill 6626a (1989) requires the Board to focus on the upper-division educational needs of placebound students who live in areas of the state not currently served by either existing four-year institutions or branch campuses. This study will include recommendations on how the needs should be addressed and which institutions should be responsible for serving specific areas. At the same time, Board staff are reviewing existing policies on off-campus programs offered by public institutions.

C. Development of the Plan

In developing this plan, HECB staff worked closely with an Advisory Committee selected for their diverse professional interests in nursing education and practice. As required by statute, the Committee was drawn from the State Board of Nursing, the State Board of Practical Nursing, the State Board for Community College Education, The Superintendent of Public Instruction, public and independent nursing education, health care facilities, and practicing nurses. Since the members were also affiliated with a broad array of professional groups, they were asked to communicate routinely the progress of the project to those groups.

The advice of the Committee, collectively and individually, was and continues to be invaluable. Their patience and willingness to work on the project never faltered. The HECB staff are sincerely grateful for their generous time and effort, and for the resources of the institutions, agencies and organizations they represent. A list of the Advisory Committee is contained in Appendix B.

PART II - NURSING IN THE STATE OF WASHINGTON

A. The Nursing Profession

A variety of issues in health care influence nursing practice and therefore education. Dr. Ruth Waite (1989) summarized these issues in "The Driving Force for Change": changes in population, rising health care costs, altered payment systems, increasingly complex methods of delivery, ever-changing technical requirements, and the overwhelming volume of information required to provide adequate care.

For example, advances in medical technology and the push for wellness have increased the average life span. Dr. Waite reports that by 2050, over 33 percent of the American population is estimated to be over 65 years old and 5 percent over 85 years of age. In addition, the health care system will find it equally challenging to accommodate the growing population of impoverished children in America. In 1983, almost four times as many children lived beneath the poverty level as senior citizens. The social and economic cost of these children raised without proper health care will continue into adulthood. Therefore, the growing populations of the young and old who are medically needy will require nurses prepared to address the complex physical, psychological, and social needs of their patients.

Science daily provides improved methods of treatment, but modern technology and drugs are expensive. However, the American public has come to view equal access to health care as a right rather than a privilege. In addition, the growing number of uninsured, and underinsured, people needing services compound health care costs. Therefore, as health care spending continues to rise more rapidly than the rate of inflation, pressure grows for restructuring and redefining the financing and delivery of health care. Changes in federal and private payment systems now require that services be delivered in settings other than acute care facilities. Obviously nursing plays a vital role in providing these services and nurses are assuming new roles within and outside the walls of the acute care facility. In summary, nursing can provide quality, cost-effective health care, but the profession has become more sophisticated, involving complex treatments and equipment.

At the same time, the need to decrease health care costs and improve the quality of life has drawn attention to the benefits of promoting physical and mental health and encouraging preventive medicine. Nurses are key players in the health promotion and health education movement, and need to be more highly educated to make many independent clinical decisions.

In order to fulfill their changing roles, nurses must have access to accurate information. The nursing profession recognizes the importance of information technology in education, research, and practice. Computerized systems can facilitate nurses' work

in processing, recording, and securing information. This technology can lighten the clerical workload and more time can be devoted to teaching, counseling, and caring for patients and families.

The changing population of students in nursing education has required continual adjustments in programs to respond to the needs of today's nursing students. No longer a population of traditional college-age students with similar expectations and preparation, nursing students are drawn from a vast range of ages and academic preparedness. Beginning students may enter directly out of high school, or enter for the purpose of changing careers. Students may hold baccalaureate or graduate degrees in other fields, or may have little or no previous higher education. Nursing students have diverse cultural, economic and linguistic backgrounds. Part-time students who are employed full-time and single-parent students all have responsibilities outside their educational programs which place demands on their time and energy. Clearly nursing education has had to respond to the changing student population with innovative delivery systems. It is certain that this innovation will need to continue and expand as nursing education addresses change and shortage in the profession.

Nursing is one of the few professions which provides multiple entry points into practice. A variety of organizations and institutions, both public and independent, provide training and education. **Nursing assistant** training is provided by high schools, secondary skills centers, vocational-technical institutes, community colleges, and by health care providers such as long term care facilities. Students may prepare for licensure as **practical nurses** at both vocational-technical institutes and community colleges. Students may prepare for licensure as **registered nurses** at community colleges (Associate Degree in Nursing) and public and independent four-year colleges and universities (Bachelor of Science in Nursing). (For a more detailed description of these differences, see "The Structure of Nursing Education" below.)

Nursing education was not initially developed to provide student mobility among programs. However, changes in health care technology, the complexity of care and health care systems, and the desire for professional advancement have encouraged increasing numbers of practicing nurses to seek additional education and/or advanced degrees.

B. The National Nursing Shortage

There is a clear and well documented national shortage of nurses. In the Seventh Report to the President and Congress on the Status of Health Personnel, The U. S. Department of Health & Human Services (1990) reported that "What has been designated as the 'nursing shortage' is related to an imbalance between the number of active nurses and the fast-growing demand for nurses, particularly registered nurses with baccalaureate or higher education" (p. IV-C-1). The demand for nurses is directly related

to changes in the delivery of health care and the aging of the population. Patients in hospitals stay only for the most acute phase of their illness. As the length of hospital stay has been shortened, home health care has grown dramatically. Hospitals are requiring more highly skilled and educated nurses, and the management of home health care is requiring increasing numbers of baccalaureate-prepared nurses. The utilization of long-term care facilities for more acute patients has also caused increasing demands for nurses.

Among the various types of nurses, the need for additional RNs is most critical. Dr. Barbara Redman, Executive Director of the American Association of Colleges of Nursing (1988, p. 15), included the following facts in a summary of the supply and demand of registered nurses:

> Vacant budgeted nursing positions in hospitals more than doubled, from 6.3% to 13.6%, between December 1985 and December 1986. Because nearly 700,000 registered nurses (RNs) are employed in hospitals, the 13.6% vacancy rate represents a shortage of nearly 100,000 RNs.
>
> In mid-1987, an American Hospital Association survey found that 54.3% of hospitals were experiencing a "moderate" or "severe" nursing shortage.
>
> Federal estimates say the supply of bachelor's degree prepared RNs will fall short of the demand by about 390,000 by 1990 and by about 578,000 by the year 2000.
>
> Demand for RNs with master's degrees and doctorates is estimated to be three times the growing supply through the year 2000.
>
> There has been a long-term trend in hospitals to use more RNs in comparison to other nursing-related personnel (LPNs, nurses' aides). This is the result of increasingly complex care and the use of more sophisticated equipment to care for a patient population with greater nursing care requirements.
>
> Hospitals across the nation have gone from utilizing 50 nurses per 100 patients in 1972 to 91 nurses per 100 patients in 1986--an 82% increase.
>
> The demand for nurses outside of hospitals--in the increasing number of skilled nursing facilities, home care agencies, HMOs, and industry--adds to the overall need for RNs.

The supply of nurses relies heavily on nursing education programs in colleges and universities; less than 4 percent of the registered nurses in the United States are graduates of schools in other countries. But nursing education in the United States has not been able to expand rapidly enough to keep pace with the escalating demand for more and more highly educated registered nurses. The 1990 U. S. Department of Health & Human Services report found that:

> Enrollment in schools of nursing is a major factor affecting the supply of registered nurses. Admissions to programs preparing students to become registered nurses significantly declined between the 1983-84 academic year

and the 1986-87 year. Although admissions in the 1987-88 academic year increased 4.3 percent over the prior year, the number of new students remained considerably lower than the number in each of the years before 1983-84 (p. IV-C-3).

The National League for Nursing (NLN) Nursing Data Review (1989) is a compilation of survey results and findings for 1988. According to this source, the number of hospital diploma nursing programs, once the only setting for nursing education, decreased by nearly half in the decade of the 1980s. Higher education institutions have increased their nursing education programs, but have not been able to enroll sufficient numbers of students to offset the closures of diploma programs. The closure of these hospital programs, coupled with the increasing demand for registered nurses, has placed tremendous pressure on higher education institutions.

Survey results for one year later do show a significant increase in nursing student enrollments nationally. Patty L. Hawken, President of the NLN, in releasing preliminary findings from the League's 1989 annual survey stated: "For the first time in a decade, the annual survey, which includes all schools of nursing in the nation, showed a dramatic upturn in numbers of students in the profession. Fall 1989 revealed an increase of 8.9% in the number of enrollments over fall 1988" (Hawken, 1990, p. 317). While this turnaround is encouraging, both Hawken and Peri Rosenfeld, NLN Vice President, Division of Research, cautioned that enrollment and graduation data do not address the demand for or utilization of professional nurses.

C. The Nursing Shortage in Washington

A 1986 study by the American Hospital Association projected a demand in Washington state for 12,270 more registered nurses than the available supply in 1990. That imbalance between supply and demand in Washington is predicted to increase to a shortage of 38,130 nurses in the year 2000.

In 1987, the Washington State Board of Nursing conducted a survey of registered nurses in Washington. Consistent with national data, the study found that more registered nurses held active licenses in Washington than ever before. The report cites data from the Washington State Board of Nursing "that the number of nurses licensed to practice in this state has increased approximately 60 percent between 1976 and 1988" (p. 7). The study also found that 86 percent of the registered nurses with active licenses in Washington were employed. Although registered nurses with active licenses increased from 28,981 (1976) to 46,128 (1988), there continues to be a nursing shortage as a result of the dramatically increased demand.

A survey on the shortage of nurses conducted by the Washington State Hospital Association (1988) found the average length of time to fill vacant nursing positions in small

hospitals (1-50 beds) in Washington was 3-4 months. In hospitals with 51-100 beds, vacant positions required 1-5 months to fill. The medium sized hospitals (101-300 beds) were averaging 1.5-2 months to fill vacant nursing positions, while large hospitals with over 300 beds were averaging 2-3 months to fill positions. Most hospitals indicated that it took even longer to fill positions for specialty nurses.

In this study, ten (14 percent) hospitals were not experiencing a nursing shortage at that time (primarily medium-sized facilities in Western Washington). However, twenty-two hospitals (28 percent) were forced to close beds due to the shortage of registered nurses. Beds closed were primarily for critical and intensive care and were closed on several occasions from a few days to nine months, thus requiring the temporary closure of some units. Small rural hospitals reported that the increased length of time to fill vacancies is a result of fewer available registered nurses, the lack of migration to rural areas, and the lack of employment opportunities for spouses.

The critical nursing shortage in Washington hospitals is a result of several factors. According to Leo F. Greenawalt (1988), in the 1970s hospitals across the nation began moving to an all-registered-nursing staff. The versatility and decision-making skills of registered nurses could better serve the increasing severity of illness of the average patient. Evidence of this change is found in the 2:1 ratio of registered nurses to licensed practical nurses employed in Washington hospitals in 1977, compared to a 7:1 ratio in 1987. This change assumed that an unlimited supply of registered nurses would be available to meet the increasing demands in acute care institutions.

However, these shortages were not predicted when in 1983, Medicare changed its reimbursement policy from cost-based to a fixed price. Concurrently, there were also severe cutbacks by state Medicaid programs. In addition, major insurers started to use competitive bidding and alternative delivery systems for acute care services. These changes caused experts to predict a severe decline in the use of acute care hospitals and, therefore, considerably less demand for registered nurses.

However, this prediction proved to be untrue. Although inpatient days decreased in Washington by 14 percent between 1982 and 1987, the increased number of outpatients and the increased severity of inpatient illness have caused an unanticipated 15 percent increase in the demand for registered nurses.

The shortage of nurses in Washington is not unique to acute care institutions. Charles Hawley (1988) has stated that "at a time when the need for long term care is increasing, and with it the need for greater numbers of registered nurses, the supply of available nurses is insufficient to adequately respond to these needs. The long term care delivery system is particularly disadvantaged in its ability to compete with other purchasers of registered nurse services" (p. 25).

The demand for nurses in long-term care facilities is critical. The projected increase in growth of the population over age 75, and the high correlation between increasing age and functional disability, makes long-term care and particularly home health care one of the fastest growing health care services. Registered nurses represent 34 percent of the salaried full-time employees of home health agencies.

As Mr. Hawley reported, respondents to a recent survey by the Washington Health Care Association indicated that 21 percent of their budgeted positions for registered nurses were vacant and 51 percent of those vacancies took more than 3 months to fill. Nursing homes and free-standing home health care agencies are particularly disadvantaged in the recruitment and retention of registered nurses due to poor salary and benefit packages. Because of the greater reliance on public funding, salaries of nurses in long-term care facilities have not kept pace with those of hospitals.

A report by the Washington State Department of Employment Security (1989) cites registered nurses and home health aides among those occupations having significant employment growth between 1988 and 1993. During the period for which the projections have been made, employment opportunities will increase 13 percent for registered nurses, and 12.6 percent for home health aides. In a listing of occupations with the most annual average job openings, registered nurses rank 7th, with a projected total of 1,555 job openings, 745 due to growth and 810 due to vacancies in existing positions. Job openings for the category of nursing aides, orderlies and attendants rank 17th with a projected total of 943 job openings, 357 due to growth and 605 due to vacancies in existing jobs.

Annual average job openings for licensed practical nurses during the 1988-1993 period are projected at 616, 178 due to growth and 438 due to vacancies in existing positions. Employment for licensed practical nurses is projected to increase by 9.8 percent by 1993.

Annual average job openings for nursing instructors during the same period are projected at 56, with 11 openings due to growth and 45 openings due to vacancies in existing positions, an increase of 6.8 percent by 1993.

While much of the information concerning the shortage of nurses in Washington state focuses on the need for more registered nurses, there is also an ongoing need for well-prepared practical nurses and nursing assistants. The 1989 Washington State Legislature recognized this need when they noted the important role nursing assistants play in the health care system: "The legislature finds and declares that occupational nursing assistants should have a formal system of educational and experiential qualifications leading to career mobility and advancement. The establishment of such a system should bring about a more stabilized work force in health care facilities, as well as provide a valuable resource for recruitment into licensed nursing practice"(RCW 18.774.010).

D. Related Studies in Nursing Education

Washington is one of many states currently addressing the nursing shortage through the development of state plans. The conclusions and policies adopted by other states provided a range of alternatives which were reviewed in the development of the Washington State plan. Summaries of the nursing education plans of other states are contained in Appendix C.

The Washington State Commission on Nursing was created in October, 1988 to address issues of supply and demand of nurses in the state. The Commission includes representatives of state nursing organizations, employers, physicians, consumers, purchasers of nursing care, legislators, and educators.

As a part of its Final Report (1989), the Commission adopted recommendations and suggested strategies specifically concerning nursing education. Those recommendations and strategies are summarized as follows:

> Nursing schools, nursing organizations, state agencies and prospective employers should work together to facilitate access to beginning and continuing nursing education. Relevant strategies include: allocating a larger percentage of enrollment quotas to nursing education, supporting distance learning and outreach programs for underserved areas, and developing curriculum models to include weekend, evening, and remedial courses, accelerated and work study programs, and credit for nursing experience.
>
> Vocational schools, colleges and universities should collaborate and achieve articulation models for continuing nursing education. Relevant strategies include: identifying common outcomes for all levels of nursing education, examining methods of granting credit for previous learning, and maximizing transferability of credit from one institution to another.
>
> Nursing schools, nursing organizations, state agencies, nurses, and prospective employers should aggressively pursue funds and other resources to promote the nursing profession. Relevant strategies include: increasing monies to support nursing education programs and attract nursing faculty, providing short-term, low-interest loans for nursing students in emergency situations, and seeking donors to provide scholarships, tuition reimbursements, and forgivable loans for part-time and full-time students.
>
> Representatives from nursing education, nursing service, and the State Boards for Nursing should identify the effect of increased technology on nursing and assure that practice standards and academic curricula are current. Relevant strategies include: developing strategies to narrow the discrepancy between employer expectations and new graduate abilities, emphasizing "high tech" and "high touch" aspects of nursing so prospective nurses get an accurate picture of the profession, helping potential and existing nurses to understand the opportunities available within the profession, and establishing models of practice that encourage residencies, preceptorships, and /or advanced levels of education for specialty practice.

A paper developed by the Seattle Area Hospital Council (SAHC) Nursing Shortage Task Force contains recommendations for improving recruitment and public relations and influencing legislation. The SAHC Task Force recommended the following recruitment

strategies: provide high school counselors, students, and parents with materials which reflect current nursing opportunities, target the 25- to 44-year-old population in a recruitment campaign, and encourage existing health care personnel to seek advanced nursing education. The Task Force suggested some new approaches to improving public relations. Seattle hospitals could promote nursing in local hospitals by including promotional information in registration packets for regional and national nursing meetings, conferences, and conventions. Professional nursing organizations should encourage a positive image of nurses in editorials, news reports, and human interest articles. Nursing associations should offer to provide a nurse to speak at local meetings of appropriate interested groups. In addition, the Task Force recommended the nursing shortage issue be the top priority on the SAHC legislative agenda. Specifically, they hope to convince the legislature to increase funding and enrollments for nursing education.

Although this paper identifies strategies designed for the Seattle area, the decisions and actions of the SAHC have a broad impact on hospitals across the state and on non-hospital nursing care service settings.

E. The Structure of Nursing Education in Washington

The organization of nursing education in the state reflects the multiple levels in the nursing profession: 1) nursing assistant certified or nursing assistant registered, 2) licensed practical nurse (LPN), 3) associate degree registered nurse (ADN), and 4) bachelor degree registered nurse (BSN). In addition, master's and doctorally prepared nurses focus their graduate education on individual areas of specialty and research within the profession. Advanced study in specialty programs of midwifery, anesthesia, and advanced registered nurse practitioner (family, women's health, pediatric, adult, geriatric, and school nurse practitioners) permits a licensed specialist to perform a more highly skilled role in the delivery of primary health care.

Nursing Assistants (NAC) have a multitude of training programs to choose from. The depth and breadth of these programs differ dramatically, depending on the purpose of the training and the setting in which it is conducted. Instruction totaling 85 clock hours is offered through a combination of required course work and on-the-job training in nursing homes and other long-term care facilities. Programs requiring 560 clock hours of instruction are offered in high schools and skills centers. Nursing Assistant instruction is also offered as a preparatory program at vocational-technical institutes or as the first quarter of the practical nursing or registered nursing program at community colleges. Nursing assistants may assist in the care of patients under the direction and supervision of licensed nurses (LPN and RN).

Practical nursing (LPN) programs, typically eleven to twelve months in length, are offered at vocational-technical institutes and community colleges. After passing the national licensure examination, licensed practical nurses work under the direction of a registered nurse or licensed physician or dentist.

Associate degree (ADN) programs for registered nurses are typically two-year clinical programs at community colleges. Completion of general college requirements is also required for the associate degree. After passing the national board examination, the registered nurse engages in the practice of nursing and supervises licensed practical nurses, nursing assistants and nursing support staff.

Baccalaureate (BSN) programs prepare nurses who are also licensed as registered nurses after passing the national board examination. Students complete a formal program of four years at a senior college or university. The baccalaureate program offers additional general education, advanced nursing theory and clinical learning experiences, preparation in community health nursing, and preparation for beginning leadership and more autonomous roles in clinical practice and management in a wide variety of health care settings. Baccalaureate degrees also provide the foundation for graduate study.

Master's and doctoral level programs offer clinical specialties, programs of study in nursing services administration and education, as well as research opportunities to prepare registered nurses to assume roles as clinical specialists, nurse practitioners, administrators, researchers, faculty, and consultants.

The state of Washington has 22 vocational/collegiate nursing assistant, 24 practical nursing, 21 associate degree nursing, 14 baccalaureate, 7 master's, and 1 doctoral nursing program in its public and independent institutions. This inventory is based on program location, and includes branch campus and satellite sites. A detailed listing of Washington nursing programs by institution is contained in Appendix D.

Although the majority of programs are at public institutions, independent institutions contribute significantly by providing baccalaureate and master's nursing education throughout the state. Data from October, 1989 (Appendix E), for example, indicate that Washington independent colleges and universities enroll nearly 50 percent of the basic baccalaureate students and 86 percent of the registered nurse baccalaureate students.

F. Legal and Accrediting Authority

Responsibility for the content and quality of nursing programs in the state is shared by a number of entities.

The Washington State Board of Nursing, within the Department of Health, has specific responsibilities for program approval, curriculum content, licensure and practice of registered nurses (RCW 18.88; Chapter 308-120 WAC). The Board also has authority to determine minimum education requirements and approve certification programs for nursing assistants (RCW 18.88A; Chapter 308-121 WAC). The Board sets standards for course requirements, staffing requirements, consumer protection, and appeals processes. Staff of the Board provides program review through site visits and reports back to the Board.

The Washington State Board of Practical Nursing, within the Department of Health, has specific responsibilities for program approval, curriculum content, licensure and practice of practical nurses (RCW 18.78; Chapter 308-117 WAC). Like the Board of Nursing, this agency sets standards for course requirements, staffing requirements, consumer protection, and appeals processes. Staff of the Board provides program review through site visits and reports back to the Board.

Public and independent college and university boards of regents and trustees, with the assistance of their faculty, prescribe the course of study in the various colleges, schools and/or departments, and grant to students certificates or degrees as recommended by the faculty (RCW 28B). Program quality is established and controlled by each institution. Program curriculum is designed and developed by the faculty of the program, with citizen advisory groups (practicing professionals) providing input. The faculty and administration ensure that programs meet the requirements of regulatory and specialized accrediting agencies.

The Higher Education Coordinating Board has responsibility to review, evaluate and make recommendations for the modification, consolidation, initiation or elimination of programs at public four-year institutions in the state (RCW 28B.80.340), and to approve some community college programs (those over 120 credits). The Board also establishes statewide policies on such matters as transfer and admissions.

The State Board for Community College Education (SBCCE) has responsibility for the location and approval of programs, assurance of employment opportunities, and program operating criteria at community colleges (RCW 28B.50.090). The SBCCE and the State Board for Nursing both have legal program review authority for nursing programs and have an agreement regarding the division of responsibility for program approval. Educational objectives for SBCCE programs are defined in statute. The SBCCE has legal authority to set curriculum standards, but allows academic freedom. The community colleges follow nursing curriculum standards designated by the State Board for Nursing.

The Washington State Board of Education and The Office of the Superintendent of Public Instruction (SPI) have responsibility for program approval at high schools, skills centers, and vocational-technical institutes. SPI does not establish program standards in statute, but does issue guidelines (RCW 28A). The Superintendent of Public Instruction mandates instructor and advisory committee requirements.

The National League for Nursing is the professional accrediting association that establishes standards for its member programs. NLN accreditation provides external review of practical nursing (PN), associate degree (ADN), baccalaureate (BSN) and graduate programs, facilitates transfer between/among programs, and allows interstate mobility. All of the programs at the baccalaureate or higher level in Washington public institutions are accredited, as are all but one program at independent institutions.

Programs at 12 of the 18 community colleges offering ADN programs in Washington are accredited. Practical nursing programs in Washington community colleges and vocational-technical institutes are not accredited at this time. NLN accreditation is not applicable to nursing assistant programs.

Both the American Nurses Association and the National Association for Practical Nurses have mechanisms for approving continuing education programs. The process is not uniform since several professional associations can approve continuing education.

PART III - CRITICAL ISSUES IN NURSING EDUCATION

A. Geographic Availability

The list of programs in Appendix C suggests a wide range of educational opportunities are available across the state for those studying nursing. Yet there continue to be severe gaps in educational delivery. There is no baccalaureate program north of the Puget Sound area, in the north central area, or the southeast, and only four total (Spokane, Yakima, Tri-Cities) east of the Cascades. The associate degree and practical nursing programs are better distributed, due to the state's extensive community college system; however, these programs are not available in many remote areas of the state.

This plan does not recommend the creation of additional nursing programs in the state. Such programs are necessarily costly in terms of equipment, space, and the faculty time required for clinical instruction. In addition, they are dependent on the availability of nearby comprehensive clinical facilities. Instead this plan focuses on the obstacles to using existing programs to provide better geographic access, and suggests ways to overcome those obstacles.

Recent and Planned Expansion

A number of programs leading to a degree in nursing are operational or planned for areas of the state that were unserved or underserved five years ago. A brief look at these programs demonstrates the progress which has been made in the recent past and provides models for the expansion of existing programs to other underserved areas.

In 1987, Gonzaga University began a distance learning program to assist registered nurses living in areas without university access to further their education and attain the Bachelor of Science in Nursing degree. The program is designed to reduce obstacles inherent in advanced study, yet ensures a quality education through a blend of distant and on-campus study and clinical experiences. Students enroll in and complete the same nursing and liberal arts courses as on-campus students. Videotapes of live classes are sent to students weekly, and students participate in campus classes and experiences periodically. Clinical practica are arranged in distant sites and coordinated by on-campus

faculty. Master's prepared individuals in the distant locations are hired as adjunct faculty to provide clinical instruction and supervision. Adjunct faculty work under the direction of campus faculty to ensure consistency in course implementation. Campus faculty also travel to distant sites periodically. Currently, 36 students in 18 locations are enrolled in this program.

Since 1981, Washington State University has offered the BSN for both generic and registered nurses at Yakima. Students may complete lower-division prerequisite and general university required courses at Yakima Valley Community College, Heritage College, or Central Washington University. The WSU Lower-Division Nursing Advisor provides academic advising for the nursing students. Nursing courses are taught via videotapes produced at ICNE-Spokane, supplemented by telephone conferences and periodic faculty travel to Yakima. Resident nursing faculty are present in Yakima for laboratory, practicum, and seminar learning activities. Some practicum sections in the Yakima program (especially in community health nursing) take place in surrounding rural areas.

Beginning Fall 1990, Washington State University is offering the baccalaureate program for registered nurses at both its Tri-Cities and Southwest Washington branch campuses. Each of these programs has a planned enrollment of 30 full-time equivalent students. Nursing courses are taught at both branch campuses through the Washington Higher Education Telecommunication System (WHETS). Resident nursing faculty are present at both branch campuses for laboratory, practicum, and seminar learning experiences.

The University of Washington plans to offer a BS in Nursing at both the Bothell/Woodinville and Tacoma branch campuses beginning Fall, 1992, with an initial enrollment of 50 full-time equivalent students at each branch campus contingent on funding.

In the last five years, Pacific Lutheran University, Seattle Pacific University and Gonzaga University have all instituted Master's in Nursing degrees.

In the last five years, community college Associate Degree Nursing programs have been initiated at Grays Harbor College, at Clarkston (Walla Walla Community College), at Big Bend Community College (by Columbia Basin College), and at Omak (Wenatchee Valley College). Skagit Valley College is currently in the process of instituting a program at Whatcom Community College.

In addition to full degree programs, nursing education has also grown in the last five years to include new campus outreach efforts, consortia arrangements, collaborative arrangements with health care facilities, and evening/weekend programs by both public and independent institutions in Washington. Examples of institutional efforts to accommodate students who work full-time and/or have children include providing evening

clinical rotation and offering practical nursing course work on a weekend schedule. Some community college students may schedule clinical visits for every other week. One college expanded the hours of its campus Child Development Center to accommodate nursing students with children. Some part-time baccalaureate and master's students have the opportunity to take evening classes and practica.

Some institutions are making special efforts to accommodate rural students. Selected prerequisite and non-nursing courses and the first three quarters of the nursing program are offered in rural areas. In 1987-88 and 1988-89, rural nursing experiences were offered to a few baccalaureate level students enrolled in psychiatric/mental health and community health nursing courses. Practicum sections in these courses were held in surrounding rural areas. This effort was accomplished with the assistance of Eastern Washington Area Health Education Center grants to allow students and faculty to stay overnight. The Western Washington Area Health Education Center has also given support to students for rural hospital and community-based experiences.

One institution is working to accommodate high school students by articulating their nursing assistant program with local high schools. This program would prepare students to take the Nursing Assistant Certification exam and would grant them advanced standing in the practical or registered nursing program.

Funding of Current Programs

There can be no doubt that the current enrollment levels of many nursing programs, both public and independent, are severely limiting the extent to which higher education can alleviate the nursing shortage. In October, 1989, members of the Council on Nursing Education in Washington State (CNEWS) collected comprehensive data on applications, admissions, enrollments, and completions for all nursing programs at Washington public and independent institutions. Compilation and analysis of that data (Appendix E) indicate that community colleges accepted 71.9 percent of all eligible applicants and reported 633 eligible applicants (28.1 percent) for which no spaces were available. The four community colleges with the highest number of unserved eligible applicants are Skagit Valley (118), Shoreline (100), South Puget Sound (98), and Highline (60). These community colleges account for over 60 percent of the unserved total number of students.

At the University of Washington, only 54.4 percent of the eligible applicants to the baccalaureate program were offered admission. The survey indicated that all eligible applicants to baccalaureate programs at independent institutions and the ICNE were offered admission. Fall 1990 applications to the ICNE surpassed available space. Most independent institutions, however, continued to have space available for additional students.

Deans, directors, and faculty of nursing programs cannot actively address the nursing shortage without the support of their administrations. Adequate funding of current programs must occur at both the institutional and state levels.

Unfortunately, funding by the Legislature of additional enrollment at the average cost, or a percentage of the average cost, aggravates the problem. Nursing program costs exceed the institutional average cost per FTE. Therefore, even when FTEs are "fully" funded (at the average cost), institutions find it difficult to allocate additional spaces to nursing programs because the remainder of new spaces must then be allocated to a limited number of low-cost programs. When enrollments are funded at "marginal" or less-than-average cost, the chances of any of those spaces going to nursing programs are almost none.

Institutional budget requests for the 1991-93 biennium include requests for additional enrollments. Increases in enrollments have been requested either in general (community colleges) or by specific discipline (University of Washington School of Nursing and the Intercollegiate Center for Nursing Education). The HECB's policies on enrollment growth and service to placebound students provide the foundation for supporting increases in nursing education enrollments. Enrollment increases in nursing education are necessary and appropriate to address the state shortage.

In addition to increases in funding for basic nursing enrollments, certain populations may need special attention. In order for LPNs to articulate into ADN programs, additional space in the second year of ADN programs may be required. Community college students in either ADN or combined PN/ADN programs generally enter the program as first-year students. Most of these students complete their first year of study and continue on into the second year, leaving few opportunities for returning LPNs to enter the system.

The University of Washington and the Intercollegiate Center for Nursing Education offer basic baccalaureate and registered nurse baccalaureate (RNB) programs. The RNB programs at these institutions are small compared to enrollment in their basic baccalaureate programs. Conversely, RNB programs at independent colleges and universities account for approximately one-third of the total students enrolled. Special attention in the form of enrollment support at public institutions, as well as increased scholarship support to students at independent institutions, may be needed to increase the number of RNs returning for a baccalaureate degree. Nurses for whom advancement is blocked due to lack of further education may well be tempted to leave the profession.

Master's and doctorally prepared nurses are needed for research, administration, and specialized clinical practice. Increased enrollments in registered nursing programs will require additional graduate-level prepared nursing faculty to teach them.

Nurse practitioners are RNs with advanced training in a specialty area. These highly skilled nurses are able to function in independent roles as primary health care workers in areas such as women's health, pediatric and geriatric care. By 1995, nurse practitioners will be required to have a Master's in Nursing.

Faculty

The level of education and the availability of faculty vary significantly among types of nursing programs. Faculty for nursing assistant programs in high schools, skills centers, and vocational-technical institutes are required to have vocational certification in their field. Faculty for practical nursing programs in vocational-technical institutes and community colleges are also required to have vocational certification in their field. There are two ways to obtain vocational certification: with an academic degree or with work experience in the field; certification is monitored by the statewide center for vocational technical certification. (WAC 180.77) There will be a master's equivalency requirement for VTI faculty by 1992.

The National League for Nursing and the State Board of Nursing require that faculty who teach in registered nursing and other advanced degree programs have master's degrees in nursing. Master's prepared faculty in baccalaureate programs must teach in their area of specialty. There is a shortage of master's prepared nurses to teach in registered nursing programs. Currently, several associate degree programs in Washington state have applied for waivers allowing full and part-time faculty to teach without master's degrees. Faculty shortages may be a function of geographic location of nursing programs, low salaries, and/or an insufficient number of nurses with master's degrees.

Doctorally-prepared faculty, preferably with doctorates in nursing, are required for tenure-track and tenured positions (Assistant, Associate and Full Professor) for baccalaureate and graduate programs. Doctorally-prepared faculty not only make significant contributions to the instructional programs, but also advance the profession of nursing through their scholarship, research and public service. Although doctorally-prepared faculty are recruited nationally, there has been some difficulty in obtaining doctorally-prepared faculty in specialty areas.

Independent and public institutions alike need to strengthen their commitment to faculty resources in order to address the changing educational needs of the profession. Full-time, tenure-track faculty especially enhance the quality of a program through their continual involvement in student counseling and recruitment. They also are better prepared to develop innovative curricula and to provide the continuity needed for curriculum and program development.

Nursing faculty salaries, like other health science salaries, are not always comparable with salaries available in clinical practice. When faculty salaries are not

competitive with the health care industry, faculty cannot be recruited or educators often resign their positions to return to practice. The constant turnover and vacancies in these positions is clearly detrimental to sound educational programs.

Additional Geographic Access

To the extent that nursing programs produce individuals who serve primarily their immediate geographic area, it is important to provide nursing education at or near the areas of greatest shortage. The Department of Health's shortage areas for nurses, updated annually, are one key indicator of geographic need. The method for determining shortage areas applies to the entire health profession, but the shortage areas for nursing are not likely to differ dramatically. Using these shortage areas as a guide, institutions should focus outreach and distance learning programs on currently underserved areas of the state, assuming the population is adequate to support a local program. Such programs will require increased use of telecommunications and shared resources. Community colleges should provide library resources and conference and testing centers for outreach programs. Off-campus and outreach programs may require higher funding levels due to the higher costs of taking programs off campus and the lower faculty/student ratio of such offerings.

Expansion of nursing education into new geographic areas will require additional funding and qualified faculty. In addition, issues of clinical facilities, instructional delivery systems, and employer and community support must be addressed.

- Clinical Facilities and Staff

Clinical teaching and learning is an integral component of nursing education. Nursing faculty design student experiences with patients and clients in health care settings to accomplish specific learning objectives, and usually supervise learning activities on site. Some defined learning experiences allow the student to be directed by a local health care facility staff member with faculty available as a resource.

The following conditions are necessary in order for clinical learning objectives to be met:

1. There must be adequate numbers of appropriate patients or clients for the number of students in clinical courses.

2. There must be patients with nursing and medical diagnoses which correlate with the learning focus of the particular course.

3. Facility staffing ratios and the range of patient illnesses must be conducive to learning, i.e., positive models of health care delivery must be presented. The clinical site must provide a safe environment for learning activities.

4. For experiences requiring direct local staff supervision, there must be qualified staff available, with workloads which allow for the added responsibility of supervising students.

All of these factors must be considered when discussing the possibility of expanding existing programs or creating offerings in new geographic areas. In urban areas with multiple health professional training programs, access to appropriate patient experiences may be limited in depth, breadth, and numbers. The inability to meet conditions stated in items three and four can and does raise barriers to clinical learning. In rural areas, where provision of types of health care may be particularly circumscribed, any of the four requisite conditions may be problematic. Additionally, conditions in any community may vary substantially from quarter to quarter as the patient census fluctuates, along with available staff and competition from other educational programs.

- Instructional Delivery Systems

The ability to use telecommunications to deliver a portion of site-based nursing instruction is dependent on the availability of adequate telecommunications systems and the appropriateness of the subject matter to that method of delivery. In all cases, the quality of the education must take priority. Distance learning must maintain close ties to home campuses, but must provide the necessary support at the community site to ensure a high quality educational experience.

Other distance learning options, such as adjunct faculty, traveling faculty from the home campus, and teleconferencing, should also be considered.

- Employer/Community Support

The success of a community-based nursing program depends on the support of local health care providers. Community organizations and local employers can aid a nursing program by granting clinical staff release time, allowing flexible work schedules for students, providing local scholarships, and sharing facilities and equipment. Deans and directors of nursing programs and local administrators of hospitals, clinics and long-term care facilities should be encouraged to collaborate and define specific courses or programs that are needed in their community.

Student Access

Increasing geographic availability of programs will not succeed in alleviating the nursing shortage without simultaneous efforts to recruit and retain a wide diversity of students and to provide adequate financial support.

- Recruitment

Encouraging high school students and working adults to consider careers in nursing is one key to increasing the number of nurses in the system. Several model programs have already been developed nationally which Washington can emulate.

The National Commission on Nursing Implementation Project (NCNIP) initiated a National Nursing Image Campaign in February 1990. The campaign consists of print, radio, and television public service announcements which have been distributed to major television and radio stations and newspaper and magazine editors. The announcements have been broadcast in Washington since the campaign began and will continue for three years.

The National Commission on Nursing Implementation Project (NCNIP) in cooperation with the Texas Hospital Education and Research Foundation has developed the McMurphy Nursing Project. The primary focus of the project is to recruit high school students into the nursing profession. The secondary market includes hospital administrators and department heads, the general public, community groups, and college students. The McMurphy video and print package, to be released in November, 1990, explores the wide range of career options and rewards available to professional nurses. The package is planned for distribution to all junior and senior high schools and schools of nursing at no charge. Integral to this project are workbooks being developed for the students and for high school guidance counselors--an influential group in the recruitment of nursing students. The Washington Organization of Nurse Executives, through its Executive Director, has participated in the design and review of this project.

- Minority and Special Student Programs

There is a dramatic shortage of male nurses and nurses from ethnic and racial minority populations in the state of Washington. Given the need to serve an increasingly diverse and multilingual state population, this shortage requires special attention. Even in programs with enrollment limits, efforts need to be made to increase the percentage enrollment of men and members of ethnic and racial minorities, to provide a broader student mix.

To address the need for increasing cultural and ethnic diversity in nursing education, some institutions have developed a course for students in nursing who have English as a Second Language. This course assists students with technical and medical language skills. Others support community efforts to recruit students of color, such as the Yakima Indian Nation's health profession recruitment and retention program. If nurses are to reflect and be responsive to the diversity of clients they will be serving in the next decade and beyond, however, much more needs to be done.

▸ Scholarships and Financial Aid

Scholarships and financial aid are available to students in public and independent institutions, although federal funding for these programs is decreasing. Financial assistance provides opportunities for those who could not otherwise enroll, thus expanding the student mix to reflect the diversity of the citizenry.

The State of Washington has one scholarship program specifically for nurses. The Nurses Conditional Scholarship Program, administered by the HECB, provides scholarships to students in practical, associate, baccalaureate, and master's degree programs. As a condition of the scholarship, each recipient is to provide nursing service for five years in a nurse shortage area as determined by the Department of Health. In addition to practice, scholarship recipients may fulfill their obligation by teaching a designated nursing specialty or teaching nursing in a designated geographic area.

A portion of the funds for the Nurses Conditional Scholarship program is reserved for persons wishing to pursue nursing education in the field of mental health. Mental Health nursing scholarships are aimed at persons who agree to work in either of the two state psychiatric hospitals or with community mental health providers in underserved areas.

The Washington Department of Health recently surveyed representatives of health professional organizations, employers, educators, recruiters, and licensing authorities concerning the most effective state programs and policies (1990). The Nurses Conditional Scholarship Program was the second most popular program among professionals and employers.

In 1989-90, final scholarship awards, both new and renewals, were as follows:

	Nurse Appropriation		Mental Health Appropriation	
Level	**Number**	**Awards**	**Number**	**Awards**
LPN	8	$ 8,960	1	$ 600
ADN	28	44,483	6	8,675
BSN	24	69,600	7	28,100
MN	9	26,000	2	6,000
TOTAL	69	$149,043	16	$35,375

In 1990-91, the following scholarships were awarded:

Level	**Number**	**Awards**	**Number**	**Awards**
LPN	8	$ 13,100	1	$ 745
ADN	26	37,052	2	2,400
BSN	34	94,287	19	54,780
MN	9	24,600	1	3,000
PhD	1	3,000		
TOTAL	78	$172,039	23	$60,925

In 1990-91, there were 160 applications for the 101 scholarships awarded. Recipients of the scholarship are enrolled in the following programs: practical (16), associate (68), baccalaureate (68), master's (7), doctorate (1). There is no question that need for this program exists and that it is serving the purposes and intent of its legislation. There continues to be far greater need than funds available.

Concerns have been raised about the discrepancy between the amount of the scholarship and the required period of service for some recipients. For example, a practical nursing student might receive only $750 for one semester of study while a baccalaureate student might receive $12,000 for a four-year program, but both would incur the same service obligation in a nurse shortage area for five years. In order to be responsive to the variety of nursing programs, the service period for this scholarship should be revised to be proportional to the value of the scholarship.

Nursing students residing in counties served by a public institution branch campus are also eligible to apply for Educational Opportunity Grants. These grants were created to provide an incentive for placebound students in heavily populated areas to complete their baccalaureate education. Placebound students are individuals with family or employment commitments, health restrictions, financial need, or similar factors that prevent them from relocating in order to attend college. Administered by the HECB, the Educational Opportunity Grant encourages placebound students to finish their education at institutions, public or independent, which have existing enrollment capacity. To the extent that students will go to institutions where there is available capacity, presumably the state can save money. Grants of $2,500 have been awarded for the 1990-91 academic year to 192 eligible applicants. Because many of them would be considered placebound, nursing students are good candidates for this program.

Like all students in higher education, nursing students are eligible to apply for State Need Grants and may participate in the State Work Study Program. Work study programs benefit students by providing valuable job experience and financial assistance.

During the last federal reauthorization of the Higher Education Act, Congress authorized states to use up to 20 percent of federal State Student Incentive Grants (SSIG) funds for community service work study placements. Washington State is one of two states nationally to avail itself of this provision. In 1990, the HECB asked institutions to submit proposals for creative ways for state work study students to work in community service. The HECB awarded eleven grants, two to institutions allowing students to work with community mental health providers. Proposals will be invited again in spring, 1991. The amount of money committed for these special projects will depend upon the level of funding approved for the Washington State Work Study program in 1991-93.

Because of financial need, there are many qualified prospective nursing students who do not pursue higher education. This problem is especially acute at independent institutions, which have available capacity but where tuition and fees are higher than most students can afford. Although existing state financial aid programs are applicable at

independent institutions, there are not enough awards, and the amount awarded is not nearly high enough to cover the educational costs at independent institutions.

Financial support must continue and increase if the state is to improve its production of nurses and their ability to advance to higher levels of education and practice. This focus is essential if the health care needs of Washington and the educational needs of nurses are to be met.

B. Articulation

Increasing enrollments in existing nursing programs, expanding to additional geographic areas, and supporting students to enroll in available programs at independent institutions will go a long way toward increasing the number of nurses available in the state. However, improving the access of practicing nurses to existing programs and increasing their mobility through the educational system is also necessary. Improved articulation provides more nurses with the level of education required in today's complex health care settings and creates incentives for them to remain in the profession. In addition, the state has a continuing interest in providing efficient, cost-effective education which does not require students to duplicate work unnecessarily.

In the areas of curriculum standards, transfer of credit, and validation of prior learning, there exist both real and perceived obstacles to student mobility. Some of these are necessary and appropriate differences among types of programs; some are unnecessary obstacles which can be eliminated or lessened; and some are misperceptions or misunderstandings on the part of students about what kind of mobility or transferability to expect. Before turning to each of these areas, though, it is important to understand what additional education nurses want.

<u>The Need for Further Education</u>

The extent to which practical and registered nurses licensed in Washington recognize the need for further education is documented in two recent reports. In 1987, the Washington State Board of Nursing conducted a survey of registered nurses in Washington. Approximately 14,000 registered nurses participated in this study. The findings are not completely generalizable to the total population of RNs in the state, but provide the most comprehensive expression available of the need for further education.

Respondents were asked: "If you believe additional education is needed to enhance your employment in nursing or for your return to nursing, what type of program would you be interested in?" Of the 7,666 (57 percent) respondents who indicated additional education was needed, 27 percent were interested in a general refresher course, 35 percent in a baccalaureate program, 12 percent in a nurse practitioner program, and 26 percent were interested in a master's degree program.

Survey respondents were asked to indicate what factors would facilitate their access to educational opportunities. The respondents indicated the following factors: flexibility of educational program schedule (55 percent), flexibility of class hours (56 percent), geographic availability of program (46 percent), scholarship assistance (45 percent), information about program availability (38 percent), and assistance with program admission (20 percent).

Nurses employed full-time in nursing (53 percent) indicated a greater need for scholarship assistance. The greatest difficulty with geographic availability of courses was indicated in the Southwest, North Central, Peninsula, Northeast and Southeast regions and in Kitsap County. The need for geographic availability of courses was expressed least in King County.

The Licensed Practical Nurses Association conducted a similar survey in 1988 and approximately 4,300 licensed practical nurses responded. These responses were not generalized to the entire population of LPNs in Washington, but clearly confirm the need for a well-articulated system.

Of the LPN respondents who were asked what type of education they needed to enhance their employment or to return to nursing, 33 percent indicated a general refresher course would be adequate; 51 percent desired an ADN; and 16 percent wanted a BSN. In responding to what aspects of nursing education would be helpful to LPNs, respondents indicated flexibility of class hours (57 percent); flexibility of educational program schedule(48 percent); scholarship assistance (48 percent); information about program availability (42 percent); geographic availability of the program (40 percent); and assistance with program admission (26 percent).

Curriculum Standards

The curriculum standards in various nursing programs are seen by some as an obstacle to student mobility and therefore entrance and progression through the profession. It is important to remember, however, that nursing is a profession with multiple entry points, depending on the type and level of responsibilities expected. A licensed practical nurse (LPN) does not perform the same kinds of duties as a registered nurse (RN), and even an RN with a baccalaureate degree may be working at a different level or have different responsibilities than an RN with an associate degree. Each type of educational program--nursing assistant, practical nurse, associate degree, baccalaureate, and master's--has its own distinct educational goals, and therefore its own curriculum standards. It is inappropriate to expect one to mirror another, any more than one would expect training for dental assistants, dental hygienists, and dentists to be comparable. Each level of education must stand on its own, with its unique coherence and integrity.

Even within one level (e.g., baccalaureate nursing), variations among institutions are normal and expected, as faculty and governing boards have differing visions of what a BSN curriculum should look like. The agencies and associations described in "Legal

and Accrediting Authority" above, especially the NLN and the state nursing boards, however, do set and monitor minimum standards for curriculum, but they all defer to the individual institutions--and properly so--to establish actual degree requirements.

There is and should be room in the setting of curriculum standards for individual institutions to ensure that nursing programs at the same level are reasonably comparable. Degree requirements at one institution should not be excessive or significantly out of line with others in the same system or within the profession.

Understanding some of the differences in curriculum standards among nursing programs requires some appreciation of their complexity. Community colleges, for example, offer different combinations of nursing programs. Curriculum structure depends on whether the program is practical nursing only (PN), a combined practical/associate degree program (PN/ADN), or an associate degree program only (ADN). Community colleges which offer ADN-only programs, as opposed to those that offer a combined PN/ADN, may not structure the ADN courses so the first year is compatible with a PN program. The result is that LPNs who continue their education at institutions with only ADN programs may be required to take RN course work which was offered in the first year of the ADN program.

Program goals and objectives may include professional standards beyond licensing requirements. For example, programs with NLN accreditation must comply with established NLN standards and thus may differ from programs that are not NLN accredited. Non-accredited programs undergo no national peer review.

Within NLN-accredited community college nursing programs, there is a significant range in the number of nursing credits required for an ADN degree. The Associate Degree in Nursing is a comprehensive program which includes nursing-specific courses and related clinical instruction, math and science requirements, and the general community college requirements for the associate degree. The general education requirements for an ADN range from 41 to 55 credit hours, and the required nursing courses range from 64 to 88 credit hours. The result is that programs with similar goals and objectives require completion of total credit hours ranging from 108 to 132.

Some programs have responded to the challenges of a changing profession or geographic location by requiring additional courses to prepare students to meet the increasing demands of practice or respond to local community needs. These often increase the total credits required for graduation, not all of which will transfer to the next level of education.

The requirement of a significant number of additional courses blurs the distinction between ADN and BSN education. The challenge is finding a balance between meeting the demands of employers and retaining a program length that does not place undue hardship on students.

Non-nursing course requirements also appear to differ among community colleges, particularly in the requirement of college-level chemistry. A few community colleges do not require college-level chemistry in their ADN program if the student has had chemistry in high school. This may lead to articulation problems because college-level chemistry courses are usually required for admission to a baccalaureate program. Non-nursing and general education courses in ADN programs need to meet the program objectives, meet the general requirements of the institution, and be transferable to baccalaureate programs.

Transfer of Credit

Given the variety of nursing programs and thus curriculum standards, it is not surprising that transfer of credit from one program to another is complex. Transfer of credit occurs when one higher education institution grants course credit for academic work performed at another institution. It is decided on an individual student basis, and is an important part of any system which encourages educational mobility. Existing statewide policies, college and university requirements, and differences in individual programs all influence how transfer of credit is implemented.

- General Transfer Policies

The HECB Policy on Inter-College Transfer and Articulation Among Washington Public Colleges and Universities (1986), sets forth guidelines for transfer of credits for college-level courses offered by regionally accredited colleges and universities in Washington. It includes the following principles:

- Students who transfer to a baccalaureate institution with 90 or more community college credits must complete at least 90 additional credits at a baccalaureate institution in order to earn a bachelor's degree.

- Up to 15 credits of otherwise non-transferable vocational/ technical courses may transfer as part of an associate degree meeting the transfer policy guidelines.

- Vocational courses offered by community colleges are covered by this policy but not courses taken at vocational-technical institutes.

- Transfer credit is not normally awarded for (among other things) non-credit courses, remedial or college-preparatory courses.

The policies of this document essentially cover only the transfer of general university requirements and non-nursing courses required by the associate and the baccalaureate nursing degrees (e.g., courses taken through college science and math departments). Vocational nursing courses are not covered by these policies, except as they are individually approved.

Transfer of credit is also addressed in the NLN standards for member institutions. Blanket transfer of credit is not permitted by the NLN and transcripts must be evaluated individually. Baccalaureate programs are very similar in course content; they are mostly NLN accredited and follow the League standards. ADN programs are less similar. ADN programs may be non-accredited or NLN accredited, offer courses to meet specific local needs, and provide different educational and clinical experiences in support of these local needs.

The existence of multiple types and levels of nursing education does not guarantee automatic mobility or articulation through those levels. Each type of nursing program has its own standards, objectives, prerequisites, and requirements. In order to encourage educational mobility, the system must communicate how various levels of instruction interrelate, clearly define the differences and similarities among programs, provide planning assistance for the student to pursue further education, identify the most helpful types of preparation, and offer reasonable assurances for educational progression.

These tasks are difficult because students' expectations may not be realistic or they may not make informed decisions regarding their continued education. They may be under-prepared or not understand why they are required to take courses that sound similar to courses they have already taken. Students enrolled part-time may not fully comprehend the additional time required to complete a program under part-time conditions.

- Nursing Assistant Programs

Nursing assistant training is not structured for educational mobility. It is structured to offer beginning occupational training. Significant differences in programs at long term care facilities, high schools, skills centers, vocational-technical institutes, and community colleges limit the educational mobility of nursing assistants. New federal and state competency requirements for nursing assistants have been developed, which should improve nursing assistant training. The Nursing Assistant Advisory Committee is working to develop additional policies and education requirements for nursing assistants consistent with state and federal requirements. Existing nursing assistants will be grandfathered in without testing for skills and competencies, provided they meet the criteria of currency required in the WAC.

Nursing assistants who have trained in a vocational-technical institute or community college have completed either the initial instruction of that institution's practical nursing program or a course of study specifically designed to train nursing assistants. Transfer of credit is not an option for students who have not earned college credit, though individual evaluation of specific nursing skills is an appropriate expectation.

- Practical Nursing Programs

Students generally enter practical nursing programs for occupational training, not for educational mobility, although increasing numbers are expressing the intent to continue their education. Basic courses in practical nursing programs vary, depending on whether they are offered in a community college practical nursing program, a satellite campus program, the first year of an ADN program, or a vocational-technical institute. Some programs offer collegiate credit.

Articulation between vocational-technical institute practical nursing programs and community college ADN programs is difficult only in that non-nursing courses do not transfer from the VTIs. In the vocational-technical institute practical nursing programs, non-nursing courses are usually taught by nurse educators as part of an integrated vocational curriculum. ADN programs require the completion of separate courses in college-level science, English, social science, and math through the appropriate academic departments.

Articulation, of course, is not the only issue. Enrollment lids in community college nursing programs also discourage students. Students do not understand that they can be fully qualified to be admitted to a program and not receive admission.

- Associate Degree Nursing Programs

Associate degree nursing programs need to address the nursing shortage by facilitating admission for LPNs who wish to become registered nurses, and by providing the appropriate foundations for those registered nurses who wish to continue their education at the baccalaureate level. The ADN curriculum is designed, however, primarily for registered nurse preparation and only secondarily for articulation. A lack of understanding about these competing priorities is at the heart of much of the frustration about students' inability to transfer certain credits. It is essential to facilitate transfer opportunities without undermining basic programs.

Associate Degree Nursing programs articulate with public and independent baccalaureate programs for registered nurses. These baccalaureate programs require at least 90 credits for completion. While universities cannot accept lower-division nursing credit in lieu of upper-division nursing credits, all public and independent baccalaureate programs allow ADN nurses to receive credit through examination. The number of credits granted varies; however, most programs grant approximately 50 quarter or 30 semester credits for nursing courses. There are some ADN nursing courses which may not apply for baccalaureate credit.

The lack of NLN accreditation in ADN programs may lead to problems when transferring to baccalaureate programs, though lack of NLN accreditation in and of itself does not appear to be a common barrier to articulation.

- Baccalaureate Nursing Programs

There are multiple tasks for nursing educators of baccalaureate and graduate nursing programs in furthering the articulation of licensed nurses into their programs. Communication to ensure a clear understanding of baccalaureate program requirements, collaboration in the identification of specific barriers, and creative leadership in the resolution of articulation problems are all needed.

Specifically, baccalaureate programs designed for students who are already licensed as registered nurses require special attention. Because nursing is a mobile profession, registered nurses returning to higher education come from in-state and out-of-state institutions, with educational backgrounds from community colleges, diploma schools, and other public and independent four-year institutions. This diversified student population requires the development of new delivery systems, increased academic counseling, and stronger attention to the validation of prior learning. If Washington is to meet its need for nurses with baccalaureate education, institutions must continue their efforts to ensure articulation.

Since articulation is primarily an undergraduate issue, this plan does not discuss articulation at the graduate level.

Evaluation and Testing

The evaluation of skills and knowledge obtained through prior learning and experience is an important part of an articulated system that encourages educational mobility. Such evaluation is especially critical in nursing education where students often bring significant work experience or vocational training to the educational setting. Evaluation processes, which may include challenge exams, maximize opportunities for receiving credit for both knowledge and clinical skills.

The evaluation process must weigh knowledge and clinical skills of nursing assistants, practical nurses, and registered nurses who have received very different experience in non-collegiate settings. For example, an LPN who has been employed in a long-term care facility for 10 years has gained extensive experience in the care of the aging and may have been given relatively broad responsibilities. Conversely, an LPN who has worked in hospitals where the staffing mix is quite different may have very restricted clinical experience. Each individual must have his or her knowledge base assessed separately. Students wishing to continue their nursing education must understand that the currency of their academic credentials, the currency of their practice, and the scope of that practice all influence how much credit they receive for prior learning and where they are placed in the next level of nursing education.

There are nationally recognized examinations which institutions use to validate prior learning. Two such tests used by nursing programs are the NLN mobility exam and the ACT/PEP. Most baccalaureate programs use standardized, nationally recognized tests.

The type of testing instrument varies among ADN programs, with some institutions using "teacher made" examinations. Licensed practical and registered nurses may resent taking examinations to demonstrate their clinical skills; they may believe that holding a current license should be adequate proof of clinical skills. However, to receive academic credit for clinical skills, students must expect those skills to be assessed by faculty, using appropriate educational standards.

In addition to national and local tests, individual institutions design challenge exams in specific academic subject fields which support nursing: chemistry, biology, math, etc. These exams allow students at either the ADN or BSN level to pass required academic courses where they can demonstrate adequate mastery of the knowledge. Challenge exams in some subject fields are not available, and faculty in programs outside of nursing have little incentive to develop them.

Student Information

Probably the greatest obstacle to articulation in nursing programs is not curriculum standards, transfer of credit, or evaluation processes. It is lack of good information for students.

Many options are available for individuals who want a nursing education, and the large number of programs, institutions, and degrees that relate to nursing can be confusing to prospective students, as well as practicing nurses. Students need to have clear, consistent information about the differences among nursing programs and the limitations of existing articulation agreements. They need to know the requirements of each nursing degree and understand how their professional options may or may not be limited by their credentials.

Each institution, through its catalog and program brochures, publishes information concerning the nursing programs it offers, including the prerequisites, course requirements, and costs. The Washington State Nurses Association, with assistance from CNEWS, publishes and updates information about the state's baccalaureate programs for registered nurses. In matrix form, this chart of information has been made available to RNs throughout the state. Similarly, CNEWS has developed a matrix of LPN/ADN program information.

However, there is no single source of information for all potential and current nursing students concerning: 1) available nursing education options and how they differ; 2) academic preparation required by each type of program (prerequisites, general institution requirements, support courses, nursing courses, clinical experience); 3) benefit to the student of each type of nursing program (depth and breadth of practice, general employment opportunities, self-employment opportunities); 4) employer expectations of graduates from each type of nursing program; 5) practice arenas for each level and the limitations of practice; and 6) requirements of professional nurses in the year 2000.

Students would be assisted greatly in setting their expectations and in making informed decisions through the availability of a student resource guide. The guide would target prospective students and high school and college counselors to ensure that they have accurate information to assist in the recruitment of nursing students.

Efforts to Improve Articulation

Improving articulation has been on the agenda of the Council on Nursing Education in Washington State (CNEWS) for the last two years. As a part of their effort, conferences were held in both 1988 and 1989 that addressed the supply and demand of nurses (1988) and the identification of strategies for evaluating and acknowledging current knowledge of nursing students (1989). To continue this project, the HECB received funding to underwrite one-half of the cost for two additional conferences. The first of these, The Articulation Imperative: Strategies for Action, was held in October, 1990. The second is scheduled for April, 1991, and the Board has requested funding for one additional conference to be held in October, 1991.

Improving articulation has as its goal encouraging practicing and non-practicing nurses to continue their education at the next appropriate level. Improved articulation into programs with no space available, however, is counterproductive and just increases student frustration. To be successful, articulation must be tied to increased enrollments.

Taken together, increased enrollments and improvements in the articulation of nursing education can certainly help alleviate the nursing shortage. However, the shortage cannot be solved independent of nurse employers. Issues of low compensation, lack of autonomy, inappropriate utilization of nursing staff, and a poor working environment exacerbate the nursing shortage. These are problems which higher education cannot solve.

Measuring Progress

The success of this plan is dependent primarily on the commitment of nursing educators and higher education to make nursing programs more accessible and on the Legislature to adequately fund those programs. These efforts will be facilitated by providing a mechanism for continued communication. Progress towards increased access is necessary to ensure meeting the goals of the plan.

PART IV - RECOMMENDATIONS

The Higher Education Coordinating Board recommends that the Legislature and the higher education institutions take the following actions to address the nursing shortage and to increase access to nursing education in Washington.

Funding of Current Programs

1. The Board recommends that the State Board for Community College Education and the four-year public and independent colleges and universities give priority consideration to undergraduate and graduate nursing education in the allocation of funded new enrollments.

2. The Board recommends that in the 1991-93 biennium and beyond, the Legislature fund institutional requests for additional enrollments in nursing programs, and the required academic courses to support nursing, at rates which reflect the average cost of nursing programs.

Faculty

3. The vocational-technical institutes, two-year, and four-year higher education institutions of the state should provide adequate funds for salary, instructional support, and professional development to encourage, attract, and retain well-qualified nursing faculty.

Additional Geographic Access

4. The Board recommends that the Legislature fund initiatives for institutions to develop:

   Additional geographic access (distance learning, telecommunications), focusing on rural areas. Proposals for expanded geographic access should be developed cooperatively with area hospitals and health care agencies to ensure adequate need and the availability of appropriate clinical sites.

   Expanded use of electronic classrooms in existing programs, including using self-paced learning labs for greater efficiency.

   Improved utilization of existing facilities and clinical sites, including increased evening and weekend instruction.

Student Access

5. The Board recommends that institutions ensure a supportive environment for a wide range of nursing students by providing faculty and student education in cultural diversity, including diversity issues in the curriculum, and developing services for students with English as a second language, and for those who are educationally disadvantaged.

6. The Board recommends that institutions recruit more actively for nursing students who are men or people of color. Deans, directors and faculty of nursing education are encouraged to work closely with their Directors of Minority Affairs to ensure that nursing programs are understood and discussed with potential minority students.

7. The Board encourages institutions and deans and directors of nursing education to promote aggressively programs of financial assistance for their students and to ensure that nursing students are well informed of all forms of available financial aid.

8. The Board encourages nurse employer and constituent professional associations to address the need for increased funding for the Nurses Conditional Scholarship Program, in order to improve access to public institutions and to more fully utilize the available capacity at independent institutions. The Board also directs its staff to propose changes in the program to make it more responsive to nurses' needs.

Curriculum Standards

9. The State Board for Community College Education and the Superintendent of Public Instruction should collaborate with higher education administrators, nursing faculty, and other faculty to ensure that program credits for nursing degrees or certificates generally conform to the credit load of other programs preparing students for the same degree within the state. This effort should include a review of total course requirements to ensure that institutions do not place undue hardship on students to reach program completion.

10. All nursing programs in the state of Washington should be professionally accredited. The State Board for Community College Education and the Superintendent of Public Instruction should develop plans to have all ADN and PN programs accredited by or meet the standards of a nationally recognized nursing specialty association in the next ten years.

Transfer of Credit

11. The State Board for Community College Education and the Superintendent of Public Instruction should collaborate to improve articulation for nursing students between vocational-technical institute and community college LPN and ADN programs wherever possible. These efforts might include: formal articulation agreements, developing concurrent enrollment agreements so that students may take courses through both systems, or having the vocational-technical institutes contract with the community colleges for specific non-nursing courses.

12. Deans, directors and faculty of nursing programs at four-year public and independent institutions should collaborate with practical and associate degree nursing educators to improve articulation for licensed nurses enrolling in baccalaureate programs. Efforts should focus on communicating each institution's general university and pre-nursing course requirements, transfer of credit policy, and credit by examination policy. Both common and unique requirements among baccalaureate institutions should be identified, clarified and communicated.

Evaluation and Testing

13. Faculty of nursing programs at vocational-technical institutes and community colleges should adopt and publish clear evaluation methods for recognizing skill proficiencies of nursing assistants.

14. Deans, directors and faculty of nursing education should collaborate on the adoption and publication of clear and consistent methods of validating prior learning of nursing students at all levels, especially in the area of nursing competencies.

15. Deans, directors and faculty of nursing education should work actively with their colleagues in other academic departments to develop and make readily available to nursing students challenge exams and other evaluation methods for required non-nursing courses.

Student Information

16. The Board recommends that the Legislature fund the development and publication of a nursing student resource guide. The guide should be made available to all high school, institute, college, and university counselors and applicants to nursing programs at every level. The HECB budget request for the 1991-93 biennium includes $25,000 to fund this recommendation.

17. The Board recommends that deans, directors and faculty of nursing education annually extend an invitation to area high school counselors, economic development councils, and other appropriate community groups to visit their program site, to discuss the nursing profession, and to facilitate student recruitment.

18. The four-year institutions, the State Board for Community College Education and the Superintendent of Public Instruction should cooperatively improve nursing education information concerning transferability of credits and available options to ensure that individual students receive accurate career counseling at high schools, institutes and colleges.

Improving Articulation

19. The Council on Nursing Education in Washington State (CNEWS) should continue their articulation conferences to address barriers to a coordinated system of nursing education. The HECB budget request for the 1991-93 biennium includes $4,000 to fund this recommendation.

Measuring Progress

20. The Legislature should appoint an Advisory Committee to monitor progress toward fulfilling these recommendations. The committee should conduct an interim review in the fall of 1991, with a final review after implementation in January, 1992.

APPENDIX A

ENGROSSED SENATE BILL 6152

NEW SECTION. Sec. 713. (1) The legislature finds that a current shortage of nurses exists in many areas of the state as well as in certain nurse specialties. Surveys of nurses in Washington state evidenced a need for more accessible education for advancement to higher levels of practice.

The legislature declares that there is a need for the development of a state-wide plan for nursing education to meet the educational needs of nurses and the health care needs of the citizens of Washington state.

(2) The higher education coordinating board, in consultation with at least the state board of nursing, the state board of practical nursing, representatives of the state board for community college education, the superintendent of public instruction, public and private nursing education, health care facilities, and practicing nurses, shall develop a state-wide plan to be implemented no later than January 1, 1992. The plan shall provide for:

(a) Geographic availability of nursing education and training programs;

(b) Curriculum standards for each type of nursing education and training program;

(c) Procedures to facilitate optimal transfer or granting of course credit; and

(d) The use of evaluation processes, which may include challenge exams, to maximize opportunities for receiving credit for both knowledge and clinical skills.

The higher education coordinating board shall submit a plan to the legislature by December 1, 1990. The board shall make a progress report to the senate and house of representatives standing committees on health care by December 1, 1989.

APPENDIX B

ADVISORY COMMITTEE MEMBERS

Joann Linville,Prog Supervisor	Bellingham Vocational Technical Institute
Sheila Reilly, HO Supervisor	Clover Park Vocational Technical Institute
Jay Wood, Dir Voc-Ed	Superintendent of Public Instruction
Geoff Hodge, Dir of Nursing	Yakima Valley Community College
Dr. Myrtle Mitchell, Asso Dean	Seattle Central Community College
Celia Hartley, Dir of Nursing	Shoreline Community College
Ray Harry, Voc Ed Coordinator	State Board for Community College Education
Dr. Thelma Cleveland, Dean	Washington State University (ICNE) Eastern Washington University (ICNE) Whitworth College (ICNE)
Dr. Sue Hegyvary, Dean	University of Washington
Dr. Kay Korthuis, Dean	Seattle University
Dr. Dorothy Kellmer, Dean	Pacific Lutheran University
Dr. Gail J. Ray, Chair	Gonzaga University
Pat Brown,Acting Ex. Dir.	Board of Nursing
Patty Joynes, Ex. Dir.	Washington State Nurses Association
Joan Matheson, Ex. Dir.	Licensed Practical Nurses Association
Pat Hogan, Nurse Admin	Washington Organization of Nurse Executives
Jon Davis, Vice Chair	Washington State Hospital Association
Rick Guthrie, Vice Pres	Washington Healthcare Association
Rep. Margarita Prentice	11th District

APPENDIX C

SUMMARY OF STATE PLANS FOR NURSING EDUCATION

The Board staff requested copies of all recent state-level studies of nursing education. The responses received are summarized below.

State policies differ because of the educational programs available, health care settings, and nurse population. While the conclusions and policies of any individual state would not provide an exact model for Washington, they did offer alternatives for consideration in the development of the Washington plan.

Alabama

The report focused on a computer model for determining the supply and demand for registered and practical nurses. The model was based on assumptions about desirable staffing ratios in a variety of health care settings. The health care system has changed since the report was prepared, and the projections of need were said to be no longer valid.

California

California's Statewide Nursing Program (SNP), an off campus program in which licensed registered nurses can earn a BSN and MSN degree. The program offers modular-type courses at about 170 hospital and community college sites throughout the state. The program is financed by state funds and managed by one university.

Colorado

The focus of the study is a policy recognizing the BSN as the preferred degree for nursing practice. The plan contains enrollments at the beginning levels of nursing and expands enrollments at the RN, BSN and graduate levels. The Commission recommended targeted programs to increase access to rural training. The report concluded that caution should be exercised when considering expansions in nursing assistant programs and recommended that the state resist the temptation to make nursing assistants the beginning of the professional nurses ladder. The report also concluded that the LPN should not become a substitute for the RN/ADN degree.

The report found that more MSN and Ph.D. nurses were needed for hospital administrators, nursing directors, policy advisors, and college faculty. Recommendations included: establishing continuous programming across all levels of nursing education (LPN, ADN, BSN, MSN), adopting common courses to assure continuity, incorporating liberal arts and science requirements into all nursing curricula, and a comprehensive articulation policy. It was also concluded that to develop a comprehensive articulation policy, agreement on course requirements, curricular standards, and faculty qualifications is needed statewide.

The Commission recommended NLN accreditation for all nursing education programs, development of complete reference data for students, expansion of minority recruitment, consideration of telecommunications, and targeted programs for rural areas.

Connecticut

The Governor's Task Force on the Nursing Shortage recommends improving compensation, enhancing the work place, increasing educational opportunities, and expanding recruitment.

The Task Force sought to increase educational and career options for RN's and LPN's through flexible schedules, support services, and articulated paths for advanced degrees. Initiatives include: weekend classes, evening classes, remedial classes, pre-nursing enrichment programs, external degree programs and child care.

An articulated path from aide, to LPN, to RN and beyond was recommended. That path should include appropriate transfer of credit and advanced placement. Programs designed to articulate people with non-nursing baccalaureate degrees into BSN and MSN programs should be considered.

The Task Force called for increased financial aid for RN and LPN students. State government, private foundations, and nursing employers should provide financial aid for nursing students. Creative scholarships, such as conditional loans should be considered.

Florida

The Postsecondary Education Planning Commission prepared a series of reports on health professional education, including nursing. The Commission recommended that excellence in existing RN programs remains a priority over the establishment of new programs. The Commission reaffirmed that quality associate and baccalaureate nursing programs provide excellent preparation for registered nurse licensure. The Commission called on institutions offering practical, associate, and baccalaureate nursing programs to collaborate in order to facilitate upward mobility of LPN's.

The Commission recognized the accomplishments and continued need for collaboration between the health care industry, nursing educators, public agencies, and professional associations. Cooperation will improve salaries, working conditions, recruitment efforts, and conference organization.

The Commission recommended that associate degree programs should plan curricula in order to enhance articulation into baccalaureate programs. Institutions offering RN-to-BSN programs should create schedules that are convenient for employed RNs. The Commission recommended that nursing programs and hospitals organize Refresher Programs together. It was recommended that nursing educators examine their recruitment and retention procedures to identify barriers to the success of male and racial/ethnic minorities in nursing education.

The Florida Legislature established the Trust Fund for Postsecondary Cooperation to reward institutional creativity and initiative in assisting student articulation.

Georgia

The Coordinating Committee for the Improvement of Nursing Education recommended that: 1) recruitment programs be established to attract academically able students, 2) existing associate and baccalaureate degree programs provide alternative programs, 3) programs increase the number of full-time faculty, 4) programs use more qualified hospital staff as clinical faculty, and 5) job placement and summer externship programs be established in hospitals affiliated with nursing programs.

Indiana

The Indiana Commission on Higher Education issued a working paper that described four different models for articulation among Indiana public institutions. Case studies of nursing mobility requirements presumed that the associate degree nurse was moving from the ADN to the BSN program within the same institution.

The Commission adopted a series of principles to guide public investment in nursing programs, including: 1) all nursing programs should facilitate entry, reentry, and multiple opportunities for exit of nursing students with a minimum loss of previously earned credits, and 2) all BSN programs should provide multiple pathways toward the degree, accommodating RNs and non-RNs alike in a single program. The Commission also recommended that no new programs be authorized nor additional funding be provided to existing programs which are inconsistent with the principles.

Iowa

The Iowa Board of Nursing published a statewide plan for nursing that addressed education, practice, research, the community and ongoing statewide planning. The Board recommended basic nursing programs incorporate advances in nursing and health care, and emphasize critical thinking, problem solving, organization, and leadership.

The plan recommended cooperation between educational institutions and health care agencies, regular evaluation of clinical and classroom resources, a state-level recruitment program, five-year strategic plans for each nursing program, and schedules that include day, evening, weekend, and summer classes.

Kentucky

The Kentucky Nursing Education Project task force conducted a nursing delineation study to determine valid levels of practitioners. The task force followed standards which defined varying degrees of skill and knowledge necessary to accomplish each task. These standards became the basis for determining levels of practice and corresponding educational requirements.

The final report used the findings of the Study of Nursing Manpower Requirements and Resources. Also recommended was a call for health care and educational system policies and practices to facilitate congruency between the preparation of nurses and the responsibilities of their practice.

Louisiana

Most of the final recommendations of a study conducted by the Council of Administrators of Nursing Education were accepted in principle by the Louisiana Board of Regents. Some of the recommendations, like those dealing with minimum education levels for LPN and RN licensure, have not been implemented.

The five-year master plan addresses the need to develop innovative approaches, broaden recruitment efforts, increase the number of doctoral and master's prepared nurses, strengthen the financial base of RN programs, articulate education programs, and decrease the number of PN students while increasing advancement opportunities for LPNs.

The study recommends full NLN accreditation for all nursing programs.

Maryland

The Governor's Task Force on Nursing Education developed a model with various options to facilitate educational mobility. An articulation model was developed allowing nurses who graduate from a diploma or associate degree program to transfer directly into a BSN program in a public institution without taking placement examinations. ADN-to-BSN candidates may receive additional credit hours, with the specific courses determined by the receiving institution. Students must complete the BSN program within ten years of their diploma or ADN graduation date. Graduates of out-of-state diploma and ADN programs may transfer credits and/or take placement examinations toward a BSN degree.

This articulation agreement is possible because Maryland requires that the curriculum for all programs be consistent. The ADN programs include the basic first and second year requirements for the BSN, and the faculty in each program are Master's prepared. In addition, competency statements have been developed for all three levels of nursing.

An articulation model was developed for transferring LPN graduates of hospital and vocational high school programs to community college ADN programs. (These transfer students have the competencies and psychomotor skills required to progress from the practical nursing level to the associate degree level.)

A task force has been appointed to explore the feasibility of college credit or advanced standing for unlicensed nursing care workers who wish to enroll in practical nursing programs at community colleges.

Michigan

The Michigan Advisory Task Force on Nursing Issues prepared a report on nursing-related public health issues, including several recommendations to ensure accessible, quality nursing education programs.

The Task Force recommended the establishment of an Office of Nursing in the Michigan Department of Public Health. The Office of Nursing would have many responsibilities including, identifying emerging policy issues in the areas of nursing curriculum, student retention, student financial aid, and articulation. The Task Force intended the Office of Nursing to work with policy makers to expand nurse specialist programs and to increase the enrollment of nurses in specialized masters programs. The Office of Nursing would also review possibilities for expanding work training programs to include nursing education.

The establishment of a Nursing Career Center in the private sector was also recommended. The Center would serve as an information clearinghouse for schools and individuals interested in nursing, develop non-traditional financial aid and scholarship programs for part-time and minority students, identify suitable models for preparing nursing students for the transition to practice, and promote information exchange on effective retention strategies. The Center would also initiate demonstration projects to inform students in grades K-12 about nursing, giving special emphasis to minority students and students in rural areas, and act as an advocate for potential students seeking education through Michigan nursing education programs.

It was recommended that the Career Center collaborate with baccalaureate and associate degree nursing programs to develop an articulation plan. The plan would include a basic core of transferable lower division courses, and methods for evaluating and granting credit for nursing experience.

It was further recommended that the Career Center work with the Office of Nursing to double the number scholarships for nursing students, thus encouraging more entrants into the field to identify and report on nursing-related public health issues.

Minnesota

By state law, all associate degree programs must provide means for LPNs to transfer one-third of the nursing credits required for the ADN degree. A number of articulation agreements allow graduates of practical nursing programs to complete the requirements for an associate degree in one additional year.

Since 1983, RNs can expect to complete the requirements for a baccalaureate degree in two years of full-time study at institutions in Minnesota. Institutions offering baccalaureate programs have made program changes so that RNs can enter with advanced standing. The key to this coordination is baccalaureate degree requirements specified in terms of graduation requirements rather than courses taken. This eliminates the problem of transferring lower-division courses in order to fulfill upper-division requirements.

Missouri

The Coordinating Board for Higher Education conducted a study on graduate nursing education. The study focused on the need to expand graduate education in a state that did not previously offer a doctoral nursing program in the public sector.

Montana

The report cited very limited opportunities for educational mobility. A program with its own unique purpose was said to be unable to supply a base for another program with different, separate, and unique purposes. This policy makes it essential that abilities be tested and validated before placement in a new program. All advanced placement occurs through challenge exams. Some courses, however, transfer as elective credit.

In 1988, one public college was authorized to initiate a multi-entry/multi-exit baccalaureate nursing program. The program is intended to allow career advancement for the beginner, the LPN and the RN. The curriculum focuses on the applications of nursing, science, and technology to care for the patient in a variety of health care settings. Even this approach to career ladder development was said to require recognition of the differences of program objectives. Testing will still be required for advanced placement in the baccalaureate program.

Nebraska

The Nebraska Assembly of Nursing Deans and Directors developed transfer guides for non-nursing courses. The transfer guides are designed for individual nursing programs and identify transferrable courses from other two- and four-year colleges in the state.

A course-by-course evaluation of all non-nursing course requirements indicated numerous commonalities in transferable courses. Highly transferable courses include: anatomy/physiology, microbiology, general psychology, developmental psychology, sociology, nutrition, English, speech, and philosophy/ethics. (Chemistry courses were less similar and thus less transferable.) Non-nursing courses from accredited colleges were almost always transferable.

The transfer of nursing courses is done on an individual basis, with each school evaluating a student's prior course work for applicability to the school's program.

All baccalaureate degree programs have a specific program for the registered nurse with diploma or associate degree education. All programs offer advanced placement through validation of previous education and experiences. In most schools, RN students need to validate clinical skills. The RN student must also complete all non-nursing prerequisites, support courses, electives, and general education courses. These requirements may be met by taking courses, transfer of credit, or by validation of prior learning through standardized tests, (i.e., CLEP). Study options include full-time/part-time, evening/weekend classes, and off-campus locations.

One college offers a statewide baccalaureate degree program in which registered nurses receive advanced placement and can complete the degree requirements in their home communities. The course content is on videotape and clinical experience is scheduled at a site convenient to the student. The community college campuses serve as library resource, conference, and testing centers. Two faculty coordinators travel throughout the state to advise and supervise the students. (The program has planned articulation with the community colleges offering nursing programs so that associate degree graduates will have career mobility.)

A number of nursing programs offer advanced placement for LPNs who want to

become registered nurses. Baccalaureate programs provide opportunities for LPNs to validate some credits in the beginning-level nursing courses and then complete the upper level nursing courses. In all programs, the LPN must also all non-nursing prerequisites, support courses, electives, and general education courses.

Nevada

A subcommittee on nursing articulation agreed that graduates of associate and baccalaureate programs are being prepared to assume different roles and functions. The nurse educators further recognized that the educational preparation to achieve these outcomes is and should be different. The subcommittee developed a plan to help graduates of Nevada associate degree nursing programs articulate into baccalaureate programs.

Under the first phase of the plan, students may take the ACT PEP or the NLN Mobility Profile II examination for placement within the university. Up to 28-31 credits may be granted by examination. Tests may be administered during the student's final semester at the community college, and the scores become part of the student's official transcript. Students are required to complete the remaining upper-division nursing and general education courses. In response to NLN accreditation requirements, up to 64 general education credits may be transferred.

Under the second phase of the plan, graduates of ADN programs would not be required to take validation tests prior to transfer of lower-division credit. Upon passage of transition course(s), the student would have lower-division nursing credit accepted as transfer credit. The University of Nevada-Reno is moving toward developing a nursing curriculum which includes lower-division nursing courses which, when completed, will facilitate this process. Review and evaluation of courses will be done for transfer of lower-division nursing credit.

In the final phase, a course-by-course review for content, objectives, knowledge, and skills will provide the basis for assignment of transfer credit. This last direct transfer process will be accomplished when ADN programs have NLN accreditation.

New Jersey

After studying regional needs and geographic availability, consultants provided guidelines to institutions. Incentives for curriculum reform in nursing education and capitation grants to schools working on mobility and transfer were to be offered during 1989-90 academic year. The program began with upper-division/BSN programs, and then moved to LPN/diploma programs. Institutions were offered $200 per full- or part-time student successfully enrolled in transfer programs. Finally, capitation grants of $600 per student will be given to generic RN programs at independent institutions and hospitals.

Directors of individual programs decide whether or not to be included in the mobility agreements. Funding has been requested for $1.3 million for capitation grants and $.5 million for incentive pre-college programs.

New York

New York does not have a formal statewide plan for nursing education. The State Education Department encourages institutions to provide flexible learning options to meet the diverse needs of students. Institutions may enter articulation agreements or consortia arrangements and offer courses off campus within certain guidelines. Guidelines for the use of advanced placement mechanisms are included, as is a listing of accelerated program options.

Discussion papers were developed for the Board of Regents concerning the diminished supply of new nurses. Declining enrollments and difficulty in passing the national licensing examination contribute to the shortage in New York. The discussion papers focused on identifying problem areas and offering initiatives for corrective action.

Oklahoma

During the 1989 legislative session, the Oklahoma State Legislature passed a resolution requesting the State Regents for Higher Education review the associate and baccalaureate degree nursing programs. The Oklahoma State Regents for Higher Education have established a task force to assure that the Regent's goal of graduating approximately 1,025 more registered nurses per year from the ADN and BSN programs. A task force has also been established to work on transfer and articulation from ADN to BSN programs.

Oregon

A 1978 report on Nursing Education in Oregon was prepared under personal contract for the Oregon Educational Coordinating Commission (now Office of Educational Policy and Planning).

The report contains 29 recommendations to the Oregon Board of Nursing, the Oregon Nurses Association, the Oregon State System of Higher Education, and/or the Department of Education. Recommendations addressed the need to establish uniform standards for transfer of credits among Oregon programs; credit for prior learning; adequate and accurate student program information; continuing education programs; additional clinical time for the ADN and BSN curricula; the development of "portable" courses or programs; a rural nursing specialty at the master's level; and discussion of a tri-state doctoral program among Washington, Idaho and Oregon.

In 1985, legislation was enacted that stated that the Oregon State Board of Nursing shall not deny associate degree graduates access to the registered nurse licensure examination, or reduce student choice. The legislation provided for the Board of Nursing to appoint a master planning commission; present a plan for a study; and not make entry level nursing education or licensure changes except by statute. The Statewide Master Planning Commission on Nursing Education was established and a design for the study was prepared and presented to the Oregon State Board of Nursing in 1986. The proposed plan was not funded by the legislature, and as yet the study has not been started.

South Carolina

The South Carolina Plan for Nursing Education was prepared by the Statewide Master Planning Committee on Nursing Education. The plan contains a series of goals and objectives focusing on the development of: a competency-based model for nursing education and practice, a long range strategy for implementing the model, and a plan to maintain the balance between supply and demand of licensed nurses through 1995. The plan integrates proposed changes in nursing education with proposed changes in licensure examinations for technical and professional levels of competency. The plan proposed that the baccalaureate degree in nursing be recognized as the minimal educational requirement for professional practice in South Carolina.

The committee considered the position statements of the National Federation of Licensed Practical Nurses, Inc. when making recommendations. The recommendations are also grounded in the American Nurses' Association's support for two levels of nursing practice: a professional level, and a technical level. The report contains a draft copy of defined competencies differentiated by technical and professional practice.

The South Carolina legislature appropriated $250,000 for fiscal year 1989 to establish a South Carolina Nurse Recruitment and Retention Resource Center. While the Center is not a state agency, the Commission on Higher Education does have oversight responsibilities for the organization. The intent was that the Center would receive decreasing state funding over the next two years and would then be funded totally from private sources.

South Dakota

A report on South Dakota Nurse Supply and Demand was prepared for the Governor by the Departments of Education, Health, Labor, and the Board of Regents. A preface to the report, Articulation Between Nursing Programs in South Dakota, provides descriptive information on the issues of articulation and is followed by a series of suggestions designed to address those issues. Suggestions included the development of upward mobility programs in a variety of locations, the development and distribution of a guide to nursing education for students, the need for nursing educators to discuss changes in nursing education and the how those changes effect articulation agreements, the need for vocational-technical institutes to explore ways to qualify parts of their programs for transferable academic credit, and the need for administrators to inform students about the differences between nurse education programs and the limitations of existing articulation agreements.

Tennessee

The Tennessee Board of Regents assigned a task force to report on nurse supply and demand in Tennessee. The task force found that a shortage of LPNs and RNs currently exists and has increased dramatically since 1988. The task force estimated that by 1995, Tennessee will need twice as many ADNs, two and one-half times as many BSNs, four to five times as many master's prepared, and eleven to twelve times as many doctorally prepared nurses. The task force also reported a steady decline in enrollments in the graduations from all nursing programs.

Texas

The Texas College and University System Coordinating Board is currently involved in a project similar to that assigned to the Washington HECB. No information is available concerning the project at this time.

Utah

As a result of a study on the shortage of Utah nursing resources, the Board of Regents requested another study. The second study looked at existing nursing education programs and proposals for responding to the shortage. A decision was made to expand nursing education programs capacity. The recommendations focused on the placement of new programs, the phasing out of others, and the further study of the practical nursing programs. The Board also recommended development of curricula to enhance the mobility of nurses from one level of education to another.

Wisconsin

A Nursing Education Study Committee examined a system of orderly transfer of academic credit and methods of fostering greater articulation between associate degree and bachelor's degree programs. The report identified two areas of difficulty, the evaluation and transfer of credits between associate and baccalaureate programs and, the provision of information about educational mobility. To respond to these needs, the Committee recommended the establishment of a Nursing Education Coordinating Council to monitor implementation of the other recommendations. These recommendations called for nursing programs to develop written understandings that clarify options. Baccalaureate nursing programs were encouraged: to assess the prior learning of registered nurse students in order to grant academic credit in nursing, and to work with other university departments to assess prior learning in non-nursing areas.

Recommendations included the establishment of an expanded data base on registered nurse educational mobility. This data base would be used to assess the extent to which options for mobility are understood, available, and effective, and to disseminate information to all registered nurses, health agencies, long-term care institutions, and other interested organizations.

APPENDIX D

Nursing programs in the state are currently offered at the following locations:

NURSING ASSISTANT PROGRAMS

Vocational-Technical Institutes
- Bates
- Bellingham
- Clover Park
- Lake Washington
- Renton

Community Colleges
- Big Bend
- Centralia
- Clark
- Columbia Basin
- Grays Harbor
- Green River
- Lower Columbia
- North Seattle
- Peninsula
- Pierce
- Seattle Central
- Skagit
- South Puget Sound
- Spokane
- Tacoma
- Walla Walla
- Wenatchee/WVC-N
- Yakima

PRACTICAL NURSING PROGRAMS

Vocational-Technical Institutes
- Bates
- Bellingham
- Clover Park
- Renton

Community Colleges (separate approval for practical nursing programs)
- * Big Bend
- Centralia
- * Clark
- * Columbia Basin
- * Everett
- * Grays Harbor
- Green River
- * Lower Columbia
- North Seattle
- * Olympic
- * Skagit Valley
- * South Puget Sound
- * Spokane
- * Walla Walla
- * Wenatchee
- * Yakima

Community College Satellite Sites
- Skagit Valley @ Whidbey Island
- Walla Walla @ Clarkston
- Wenatchee @ Omak
- Yakima @ Grandview and Ellensburg

* Community colleges that offer practical nursing preparation as the first year of the Associate Degree Nursing program.

ASSOCIATE DEGREE NURSING PROGRAMS

Community Colleges
- Bellevue
- * Clark
- * Columbia Basin
- * Everett
- * Grays Harbor
- Highline
- * Lower Columbia
- * Olympic
- Peninsula
- * Seattle Central
- Shoreline
- * Skagit Valley
- * South Puget Sound
- * Spokane
- Tacoma
- * Walla Walla
- * Wenatchee
- * Yakima

Community College Satellite Sites
- Columbia Basin @ Big Bend
- Walla Walla @ Clarkston
- Wenatchee @ Omak

* Community colleges that include practical nursing preparation as the first year of the Associate Degree Nursing program.

BACCALAUREATE NURSING

Basic Nursing - these four year baccalaureate programs admit students who are preparing to become registered nurses.

Eastern Washington University (ICNE)
Pacific Lutheran University
Seattle Pacific University
Seattle University
University of Washington
Walla Walla College
Washington State University (ICNE)
Washington State University - Yakima
Whitworth College (ICNE)

Registered Nurse Baccalaureate - In addition to the basic programs, these upper-division programs admit registered nurses (graduates of associate degree or hospital diploma programs) who seek additional education.

City University
Eastern Washington University (ICNE)
Gonzaga University
Pacific Lutheran University*
Saint Martins College
Seattle Pacific University
Seattle University
University of Washington
Walla Walla College
Washington State University (ICNE)
Washington State University - SW Wash
Washington State University - Tri-Cities
Washington State University - Yakima
Whitworth College (ICNE)

*PLU offers an LPN/BSN program

MASTER'S IN NURSING

Eastern Washington University (ICNE)
Gonzaga University
Pacific Lutheran University
Seattle Pacific University
University of Washington
Washington State University (ICNE)
Whitworth College (ICNE)

DOCTORATE IN NURSING

University of Washington

APPENDIX E

In October, 1989, members of the Council on Nursing Education in Washington State (CNEWS) initiated a comprehensive data collection effort on applications, admissions, enrollments, and completions for all nursing programs at Washington public and independent institutions. The construct of the survey collected admission and graduation data for the period August 1, 1988 through July 30, 1989; however, the enrollment data were collected as of October 15, 1989. The differing time periods of data collection could tend to distort somewhat the routine analysis of the data. *For purposes of this project, however, it is assumed that the October 15, 1989 enrollments were comparable to the enrollments of the previous academic year, and the analysis is made based on that assumption.*

As with the initial collection and compilation of any data of this magnitude, the accuracy and reasonability are tested through the analysis. Survey respondents were first requested to edit the data and subsequently were asked to review a draft of the data analysis to ensure accurate interpretation.

APPLICATIONS

Application data are based on total applications at each institution. To the extent that a person may apply to more than one institution, the number of total applications will include some duplication. The survey did not collect application data to masters and doctoral programs.

Baccalaureate Programs

Total applicants to basic baccalaureate programs at public and independent four-year institutions are those persons who submitted formal applications to the departments or schools of nursing at each institution. The data indicate that for 1988-89, 82.2 percent of the applicants to public institutions were eligible for admission, while 85.8 percent of those applying to independent institutions were eligible for admission.

All eligible applicants to programs at independent institutions and the Intercollegiate Center for Nursing Education were offered admission. The data do not reflect how many additional students could be admitted to these programs under their current configuration. The available capacity in these programs needs to be assessed in the context of the larger issues of the nursing shortage.

At the University of Washington, only 54.4 percent of the eligible applicants were offered admission. This would indicate constraints imposed on program enrollments. Whether such constraints were program driven (eg. facilities, staffing, and/or clinical opportunities cannot support additional enrollments) or external (eg. state enrollment limits and/or institutional allocation procedures) was not addressed as a part of the survey.

Practical and Associate Degree Programs

Institutional policies differ regarding the application process for practical and associate degree nursing programs. At some institutions, the application process resides within the nursing department and represents the formal program application submitted for review and evaluation. At other institutions, student intent to pursue nursing as indicated on the application for admission to the institution is counted in the total nursing program applications.

Institution and program policies also differ with respect to determining the eligibility of applicants. Students in practical nursing programs will generally need to meet personal health standards through examinations, attain high school graduation or GED, and demonstrate math and English proficiency. Students in associate degree programs are required to have a broader knowledge of mathematics, chemistry, anatomy and physiology, and must complete college level courses through mathematics and science departments. Applicant eligibility may differ among institutions depending upon whether these general education courses may be taken concurrently with nursing courses, or must be completed prior to admission to the nursing program.

Eligibility for admission to combined practical and associate degree programs at community colleges may differ within a single program. The first year of the program prepares a student to take the practical nurse licensure exam. The second year of the program prepares a student to take the registered nurse licensure exam. Within these programs is a multiplicity of institution and program course requirements. Eligibility of applicants will be determined by the differing admission policies for practical and associate degree programs, as well as differing policies on the placement of supporting mathematics and science courses within or prior to admission to nursing programs.

Community colleges accepted 71.9 percent (1,619) of all eligible applicants and reported 633 eligible applicants (28.1 percent) for which there were no spaces available. The four community colleges with the highest number of unserved eligible applicants are Skagit Valley (118), Shoreline (100), South Puget Sound (98), and Highline (60) which account for over 60 percent of the unserved total.

Data on applications for practical nursing programs at vocational-technical institutes indicate 87.8 percent (347) of the eligible applicants were offered admission, while spaces were not available for 48 eligible students (12.2 percent).

The data do not reflect how many additional students could be served by these institutions offering practical and associate degree programs, nor whether constraints were caused by availability of facilities, staffing, and/or clinical opportunities or state enrollment limits and/or institutional allocation procedures.

ADMISSIONS

Admissions data cover the period August 1, 1988 through July 31, 1989.

These data indicate the number of accepted applicants who were admitted to the various programs, and provide information on the number of students transferring from programs at other institutions, or enrolling with advanced placement with previous credit and/or clinical experience.

Graduate Programs

Three universities with graduate programs admitted a total of 132 students to masters programs (University of Washington 99, Intercollegiate Center for Nursing Education 16, and Seattle Pacific University 17), and 9 were admitted to the doctoral program at the University of Washington.

Baccalaureate Programs

Admission to basic baccalaureate and registered nurse baccalaureate (RNB) programs (for those institutions that offer only an RNB program) indicate 99.0 percent of those who were accepted at public universities were admitted, and 88.4 percent of those accepted at independent colleges and universities were admitted. Transfer students from other nursing programs accounted for 1.6 percent of the admissions to basic baccalaureate programs.

Practical and Associate Degree Programs

At the community colleges, 91.9 percent of the applicants who were accepted were admitted; 91.0 percent of those accepted at vocational-technical institute programs were admitted.

Advanced placement refers to the admission of students who have had previous nursing assistant or practical nurse training and have probably been employed as a nursing care provider prior to admission into a more advanced program. In community colleges, 12.8 percent of those admitted to practical nursing programs were given advanced placement, while 16.3 percent of those admitted to combined practical/associate degree programs were so placed. Less than 4.0 percent of those admitted to vocational-technical institutes received advanced placement.

Transfer students from other nursing programs accounted for 4.8 percent of the admissions at community colleges and 1.9 percent of the admissions at vocational-technical institutes.

NURSING PROGRAMS IN WASHINGTON STATE
TOTAL APPLICATIONS AND ADMISSIONS
August 1, 1988 through July 31, 1989

	APPLICATIONS - ALL PROGRAMS					ADMISSIONS: Practical Nursing Programs Only			ADMISSIONS: Associate Degree and PN/AD in Nursing Programs			ADMISSIONS: Basic Baccalaureate		ADMISSIONS: RNB	ADMISSIONS: Master	ADMISSIONS: PhD
	Total Ap's	Eligible	First Accepted	Accepted	Eligible/ No Room	Began Program	Advance Placement	Transfer	Total Admitted	Advance Placement	Transfer	Total Admitted	Transfer	Total	Total	Total
Bates Voc-Tech	115	115	115	0	0	115	0	2								
Bellingham Voc-Tech	74	74	74	0	0	53	0	3								
Clov Park Voc-Tech	412	143	112	10	21	112	12	0								
Renton Voc-Tech	80	63	36	0	27	36	0	1								
SUBTOTAL	681	395	337	10	48	316	12	6								
Bellevue	138	107	50	19	38	n/a	n/a	n/a	50	9	1					
Big Bend	40	20	14	6	0	21	0	2	n/a	n/a	n/a					
Centralia	40	32	24	0	0	22	0	2	n/a	n/a	n/a					
Clark	156	156	90	66	0	30	2	3	60	12	11					
Columbia Basin	165	95	60	23	12	n/a	n/a	n/a	80	27	3					
Everett	202	97	72	6	19	n/a	n/a	n/a	97	23	6					
Grays Harbor	67	38	36	0	2	n/a	n/a	n/a	25	0	0					
Green River	40	40	40	0	0	40	n/a	n/a	n/a	n/a	n/a					
Highline	126	126	38	28	60	n/a	n/a	n/a	54	12	0					
Lower Columbia	125	68	60	2	6	0	0	1	59	17	10					
North Seattle	214	116	66	0	25	86	25	0	n/a	n/a	n/a					
Olympic	165	63	55	0	7	n/a	n/a	n/a	51	8	1					
Peninsula	45	34	24	2	8	n/a	n/a	n/a	24	2	1					
Seattle Central	85	85	71	5	9	n/a	n/a	n/a	67	14	3					
Shoreline	281	232	108	24	100	n/a	n/a	n/a	108	1	6					
Skagit Valley	164	164	36	10	118	n/a	n/a	n/a	46	10	0					
Skagit/Whidbey	150	30	30	0	0	26	0	0	n/a	n/a	n/a					
South Puget Sound	140	140	42	0	98	n/a	n/a	n/a	42	14	4					
Spokane	206	206	160	3	43	n/a	n/a	n/a	163	3	1					
Wenatchee Valley	70	45	38	0	7	n/a	n/a	n/a	38	5	0					
Wenatchee/North	79	45	38	0	7	n/a	n/a	n/a	24	22	0					
Tacoma	311	136	48	14	74	n/a	n/a	n/a	64	16	6					
Walla Walla	96	84	74	10	0	n/a	n/a	n/a	84	2	0					
Yakima Valley	174	127	127	0	0	n/a	n/a	n/a	127	12	10					
SUBTOTAL	3279	2286	1401	218	633	225	27	8	1263	209	63					
Intercoll Center	148	118	118	0	0							118	0	14	16	n/a
Univ of Washington	201	169	92	0	77							90	0	20	99	9
SUBTOTAL	349	287	210	0	77							208	0	34	115	9
City University	15	15	15	0	0							n/a	n/a	15	n/a	n/a
Gonzaga University	45	35	35	0	0							n/a	n/a	11	n/a	n/a
Pacific Luth Univ	56	48	48	0	0							56	1	5	n/a	n/a
St. Martin's Coll	20	16	16	0	0							n/a	n/a	14	n/a	n/a
Seattle Pac Univ	44	39	39	0	0							31	1	26	17	n/a
Seattle University	121	96	96	0	0							86	2	10	n/a	n/a
Walla Walla Coll	81	79	63	0	0							63	3	n/a	n/a	n/a
SUBTOTAL	382	328	312	0	0							236	7	81	17	0
GRAND TOTAL	4691	3296	2260	228	758	541	39	14	1263	209	63	444	7	115	132	9

n/a - not applicable

ENROLLMENTS

Enrollment data were reported as of October 15, 1989.

There were 4,249 headcount students enrolled in nursing programs at public or independent institutions in Washington. Of those, 3,631 (85.5 percent) were full-time students and 618 (14.5 percent) were part-time. The ratio of full- to part-time students differs significantly by degree program, with nearly all part-time students enrolled in baccalaureate and graduate programs. *For purposes of this analysis, it is assumed that part-time students are enrolled an average of one-half time.* Given this assumption, the estimated full-time-equivalent (FTE) enrollment was 3,940.

Graduate Programs

Of the total enrollments in all nursing programs in Washington, 48 (1.1 percent) were enrolled in the doctoral program at the University of Washington and 340 (8.0 percent) were enrolled in the three masters programs (UW, ICNE, SPU). In the doctoral program, 12.5 percent were enrolled part-time, and 50.9 percent in the masters programs were part-time students. On an FTE basis, again assuming a part-time student equal .5 FTE, 1.1 percent of the state total FTE were in the doctoral program, while the masters programs accounted for only 6.0 percent of the state total FTE enrollment because of the relatively high part-time enrollment.

Baccalaureate Programs

There were 1,249 students enrolled in baccalaureate programs, accounting for 29.4 percent of the state total headcount enrollment. On an FTE basis, 1,069 or 27.1 percent of the state total students were enrolled in baccalaureate programs.

Basic baccalaureate programs enrolled 979 (23.0 percent) of the state total enrollment, and accounted for 912 (23.1 percent) of the state total FTE enrollment. Because only 13.7 percent of these students enrolled part-time, the headcount and FTE proportion was essentially the same.

The RNB programs enrolled 270 (6.4 percent) of the state total headcount students, but only 157 (4.0 percent) of the estimated state total FTE students. These programs have the highest percentage of part-time students (83.7 percent) as the vast majority of these students are also practicing registered nurses.

Practical and Associate Degree Programs

Students in practical and associate degree nursing programs in the community colleges were predominantly full-time students. At this time, only Clark and North Seattle community colleges have part-time programs. Community college enrollments of 2,098 in associate degree and combined programs represented 49.4 percent of the state total headcount, and 53.3 percent of the state total FTE enrollments. Community college enrollments in practical nursing programs only were 260, representing 6.1 percent of the state total headcount and 5.9 percent of the state total FTE enrollment.

Students in practical nursing programs at the vocational-technical institutes total 254, 6.0 percent of the state total headcount and 6.3 percent of the state total FTE enrollment. As in the community colleges, these are predominantly full-time students, with only 4.1 percent enrolled part-time.

In the aggregate, 549 (12.9 percent) of all students were enrolled in programs of practical nursing only at community colleges and vocational technical institutes. The number of students enrolled in combined practical and associate degree programs who could be classified as practical nursing students is unclear based on the available data. Graduation data suggest that the number enrolled in combined programs seeking to attain the practical nursing licensure is significant. It is possible that up to 550 additional students are enrolled in the combined programs to complete the practical nursing program only.

NURSING PROGRAMS IN WASHINGTON STATE
TOTAL ENROLLMENTS
AS OF OCTOBER 15, 1989

	PRACTICAL		ASSOCIATE DEGREE*		BASIC BACCALAUREATE				RN BACCALAUREATE				MASTERS		PhD	
	On-Campus		On-Campus	Off-Campus	On-Campus		Off-Campus		On-Campus		Off-Campus		On-Campus		On-Campus	
	Full-Time	Part-Time	Full-Time	Full-Time	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part Time
Bates Voc-Tech	78	0														
Bellingham Voc-Tech	53	0														
Clov Park Voc-Tech	84	11														
Renton Voc-Tech	28	0														
SUBTOTAL	243	11														
Bellevue	n/a	n/a	101	n/a												
Big Bend	19	0	n/a	n/a												
Centralia	33	0	n/a	n/a												
Clark	n/a	n/a	187	n/a												
Columbia Basin	n/a	n/a	108	20												
Everett	n/a	n/a	153	16												
Grays Harbor	n/a	n/a	25	n/a												
Green River	40	0	n/a	n/a												
Highline	n/a	n/a	89	n/a												
Lower Columbia	n/a	n/a	98	n/a												
North Seattle	50	58	n/a	n/a												
Olympic	n/a	n/a	94	n/a												
Peninsula	n/a	n/a	42	n/a												
Seattle Central	n/a	n/a	140	n/a												
Shoreline	n/a	n/a	180	n/a												
Skagit Valley	n/a	n/a	72	n/a												
Skagit/Whidbey	24	0	n/a	n/a												
South Puget Sound	n/a	n/a	64	n/a												
Spokane	n/a	n/a	243	n/a												
Wenatchee Valley	n/a	n/a	69	24												
Wenatchee/North	36	0	n/a	n/a												
Tacoma	n/a	n/a	103	n/a												
Walla Walla	n/a	n/a	104	43												
Yakima Valley	n/a	n/a	117	20												
SUBTOTAL	202	58	1975	123												
Intercoll Center					219	11	18	3	1	8	3	2	16	50	n/a	n/a
Univ of Washington					189	53	0	0	11	13	0	0	147	112	42	6
SUBTOTAL					408	64	18	3	12	21	3	2	163	162	42	6
City University					n/a	n/a	n/a	n/a	2	19	0	21	n/a	n/a	n/a	n/a
Gonzaga University					n/a	n/a	n/a	n/a	6	17	0	41	n/a	n/a	n/a	n/a
Pac Luth Univ					114	16	0	0	15	1	0	0	n/a	n/a	n/a	n/a
St. Martin's Coll					n/a	n/a	n/a	n/a	0	42	0	0	n/a	n/a	n/a	n/a
Seattle Pac Univ					100	0	0	0	0	56	0	0	4	11	n/a	n/a
Seattle Univ					124	41	0	0	6	7	0	0	n/a	n/a	n/a	n/a
Walla Walla Coll					59	0	22	10	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SUBTOTAL					397	57	22	10	29	141	0	62	4	11	0	0
GRAND TOTAL	445	69	1975	123	805	121	40	13	41	162	3	64	167	173	42	6

*All full-time students

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GRADUATIONS

Graduation data cover the period August 1, 1988 through July 31, 1989.

A total of 2,021 students were graduated from nursing programs during the period of the survey. Caution should be used in interpreting percentages of program completions, due to the differing lengths of the various programs.

Data on completion of practical nursing, associate degree nursing and basic baccalaureate programs provide the information on the number of persons eligible to take the licensure exams for practical and registered nurses. The number being graduated annually in these programs is a crucial component to the consideration of the nursing shortage.

Practical nursing programs are generally one calendar year in length, approximately 1,560 clock hours at the vocational technical institutes, and four academic quarters at the community colleges. Associate degree nursing programs generally require three academic years to complete. The combination of general college requirements, prerequisites for nursing courses, and the two year requirements of the nursing program extends the total credits beyond that which is required of a student enrolled in a two year academic transfer program.

Graduate Programs

Eleven students were awarded a doctorate (23.0 percent of those enrolled) and 104 were awarded a master's degree (30.6 percent of those enrolled).

Baccalaureate Programs

In the aggregate, 441 students (35.3 percent of those enrolled) were awarded a baccalaureate degree during the survey period. Of the 979 students enrolled in basic baccalaureate programs, 333 (34.0 percent) were graduated during the survey period. Of the 270 students enrolled in RNB programs, 108 (40.0 percent) were graduated during the period of the survey.

Practical and Associate Degree Programs

At vocational-technical institutes, of the 254 enrolled, 190 (74.8 percent) were graduated.

Of the 2,358 enrolled at community colleges, 1,275 (54.1 percent) completed programs during the survey year. Of this total, 503 completed programs of practical nursing and 772 programs of associate degree nursing. Institutions offering only the one year practical nursing program graduated 126 (42.7 percent) of the enrolled students during the year of the survey.

Of those enrolled in combined programs, 377 completed the practical nursing option (the first four quarters of the associate degree program) and 422 completed the associate degree in nursing program. Additionally, 350 students were graduated from associate degree nursing programs that do not offer the practical nursing option.

NURSING PROGRAMS IN WASHINGTON STATE
TOTAL PROGRAM COMPLETIONS
August 1, 1988 through July 31, 1989

	GRADUATIONS									
					BSN		RNB			
	PN Only	ADN With PN Option PN	ADN With PN Option ADN	ADN Only	On Campus	Off Campus	On Campus	Off Campus	MS	PhD
Bates Voc-Tech	60									
Bellingham Voc-Tech	28									
Clov Park Voc-Tech	78									
Renton Voc-Tech	24									
VOC-TECH SUBTOTAL	190									
Bellevue	n/a	n/a	n/a	35						
Big Bend	16	n/a	n/a	n/a						
Centralia	17	n/a	n/a	n/a						
Clark	n/a	15	50	n/a						
Columbia Basin	n/a	30	41	n/a						
Everett	n/a	68	79	n/a						
Grays Harbor	n/a	27	n/a	n/a						
Green River	27	n/a	n/a	n/a						
Highline	n/a	n/a	n/a	42						
Lower Columbia	n/a	40	41	n/a						
North Seattle	31	n/a	n/a	n/a						
Olympic	n/a	21	31	n/a						
Peninsula	n/a	n/a	n/a	18						
Seattle Central	n/a	n/a	n/a	34						
Shoreline	n/a	n/a	n/a	70						
Skagit Valley	n/a	20	28	28						
Skagit/Whidbey	20	n/a	n/a	n/a						
South Puget Sound	n/a	21	31	n/a						
Spokane	n/a	77	83	n/a						
Wenatchee Valley	n/a	33	46	n/a						
Wenatchee/North*	n/a	n/a	n/a	23						
Tacoma	n/a	n/a	n/a	52						
Walla Walla	n/a	n/a	n/a	48						
Yakima Valley	n/a	40	12	n/a						
COMM COLL SUBTOTAL	111	392	422	350						
Intercoll Center					90	8	10	1	9	n/a
Univ of Washington					65	0	37	0	95	11
4 YR PUB SUBTOTAL					155	8	47	1	104	11
City University					n/a	n/a	12	2	n/a	n/a
Gonzaga University					n/a	n/a	8	0	n/a	n/a
Pacific Luth Univ					55	0	13	0	n/a	n/a
St. Martin's Coll					n/a	n/a	3	0	n/a	n/a
Seattle Pac Univ					25	0	16	0	n/a	n/a
Seattle Univ					57	0	6	0	n/a	n/a
Walla Walla Coll					33	0	n/a	n/a	n/a	n/a
4 YR PRIV SUBTOTAL					170	0	58	2	0	0
GRAND TOTAL	301	392	422	350	325	8	105	3	104	11

n/a - not applicable

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STATE SUMMARY

	Number Admitted	Percent	Headcount Enrollment	Percent	FTE Enrollment	Percent	Number of Graduates	Percent
Doctoral	9	0.4%	48	1.1%	45	1.1%	11	0.5%
Masters	132	5.3%	340	8.1%	254	6.5%	104	5.1%
Basic Baccalaureate	451	18.0%	979	23.3%	912	23.2%	333	16.5%
Registered Nurse Baccalaureate	115	4.6%	270	6.4%	157	4.0%	108	5.3%
SUBTOTAL - BACCALAUREATE	566	22.5%	1,249	29.7%	1,069	27.2%	441	21.8%
Associate Degree Nursing and Combined ADN/Practical Nursing	1,263	50.3%	2,063	49.0%	2,063	52.5%	1,149 *	56.9%
Practical Nursing Only	225	9.0%	253	6.0%	248	6.3%	126	6.2%
SUBTOTAL - COMMUNITY COLLEGES	1,488	59.3%	2,316	55.1%	2,311	58.8%	1,275	63.1%
Practical Nursing/ Voc-Tech Institutes	316	12.6%	254	6.0%	249	6.3%	190	9.4%
TOTAL	2,511	100.0%	4,207	100.0%	3,927	100.0%	2,021	100.0%

*377 of the total 1,149 graduated in practical nursing and 772 were awarded an associate degree in nursing.

Admission data - August 1, 1988 through July 31, 1989
Enrollment data - as of October 15, 1989
Graduation data - August 1, 1988 through July 31, 1989

REFERENCES

Department of Health & Human Services. (1990). Seventh Report to the President and Congress on the Status of Health Personnel in the United States (DHHS Publication No. HRS-P-OD-90-1). Washington, DC: U.S. Government Printing Office.

Greenawalt, L. F. (1988). The demand for nursing in acute care institutions. In S. T. Hegyvary (Ed.), Supply, Demand & Preparation of Nursing Personnel in Washington State. Seattle, WA: University of Washington, Seattle University.

Hawken, P. L. (1990). Trends are encouraging, but the shortage isn't over yet. Nursing and Health Care, 11, 317.

Hawley, C. (1988). The demand for nursing in acute care institutions. In S. T. Hegyvary (Ed.), Supply, Demand & Preparation of Nursing Personnel in Washington State. Seattle, WA: University of Washington, Seattle University.

Hegyvary, S. T., Cain, K. C., Benedict, M. B., & Issel, M. (1988). The 1987 Survey of Registered Nurses in Washington State. Olympia, WA: Washington State Board of Nursing.

Licensed Practical Nurses of Washington State. (1988). The Licensed Practical Nurses Survey Report. Tacoma, WA: Author.

National League for Nursing. (1989). Nursing Data Review -- 1989 (Research Report No. 19-2332). New York: Author.

Redman, B. (1983). The nursing shortage -- A national challenge. In S. T. Hegyvary (Ed.), Supply, Demand & Preparation of Nursing Personnel in Washington State. Seattle, WA: University of Washington, Seattle University.

Seattle Area Hospital Council. (1990). Report of the Nurse Shortage Task Force. Seattle, WA: Author.

Waite, R. M. (1989). The driving forces for change. Nursing's Vital Signs. Battle Creek: W. K. Kellogg Foundation.

Washington State Higher Education Coordinating Board. (1986). Policy on Inter-College Transfer and Articulation Among Washington Public Colleges and Universities. Olympia, WA: Author.

Washington State Higher Education Coordinating Board. (1987). Building a System -- The Washington State Master Plan for Higher Education. Olympia, WA: Author.

Washington State Higher Education Coordinating Board. (1990). Design for the 21st Century: Expanding Higher Education Opportunity in Washington. Olympia, WA: Author.

Washington State Commission on Nursing. (1989). Final Report. Tacoma, WA: Office of the Superintendent of Public Instruction.

Washington State Employment Security Department. (1989). Occupational Projections: 1988-1993. Olympia, WA: Author.

Washington State Hospital Association. (1988). Nursing Shortage Survey Results. Seattle, WA: Author.